CHINESE BA: GETTING A HOLD ON THE DISPOSAL CONSTRUCTION

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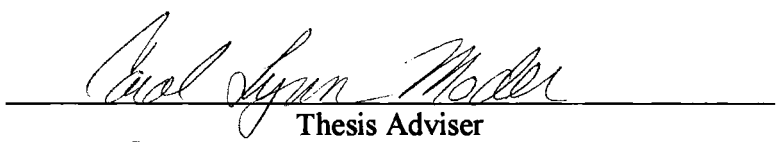

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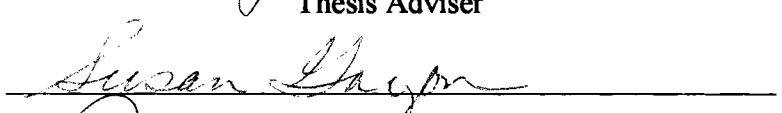

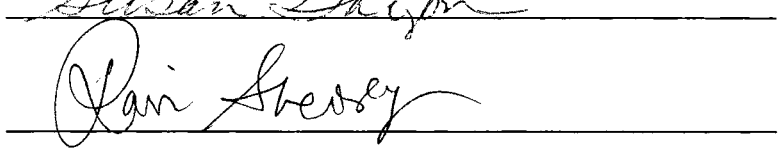

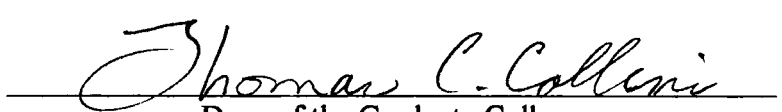

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Chapter One.

Introduction.

1. Preamble.

The Chinese word *ba*^{3} (把) and its various uses have been the subject of a great many linguistic studies from several philosophical viewpoints. In this study concepts from cognitive linguistics (Lakoff, 1987; Langacker, 1987) are investigated and applied to the problem of *ba*^{3}, to show that this word governs a radial category of uses, all inextricably linked to the meaning of *ba*^{3}, which is *to hold* or *to grasp*.

The central idea of this work is that there is a holding or controlling schema associated with *ba*^{3}, which unites its functions of noun classifier, verb classifier, partitive classifier, main verb, noun, and disposal functor in the so-called ba-construction. While many linguists have expended a great deal of effort on the disposal function of the ba-construction, considering the various complex criteria required for its grammatical use, few have mentioned the meaning of *ba*^{3}, and none have extended the *hold* meaning of the word to any kind of general schema such as that described above. It will be shown that all of the uses of *ba*^{3} in modern Chinese are derived from a central or prototypical verbal meaning; a process of chaining has occurred over time, which has extended the scope of the word to its present breadth. For the purposes of this study modern Chinese refers to the northern Mandarin lingua franca and language of administration used in China since about the year 1500 A.D. (Ramsey, 1987).

The relations between these uses of *ba*^{3} have not been adequately investigated by previous researchers, because their models of language have been restricted by a classical theory of categorisation, the downplaying of the role of semantics, and the belief in syntax

as an autonomous component of natural language. These models of language constitute the mainstream of linguistic theory in most of the world today.

I stand in opposition to these, and advocate a non-objectivist understanding of language in which meaning and function are two facets of the same entity. For this reason I shall first briefly introduce traditional schools of linguistics as relevant to *ba*^{3} and then in more depth summarise the principal concepts of cognitive linguistics.

2. Traditional Linguistics and Cognitive Linguistics.

Most of the research work on *ba*^{3} has taken place in the last fifty years or so, and thus may be considered to fall under the influence of three main schools of linguistics. The earliest papers adopted a very descriptivist or structuralist approach, which was later superseded by the mentalist or generative model of Chomsky (1957, 1965, 1988) and his many followers. Later came analyses based on transitivity or case, which may be considered functionalist.

Between the turn of the century and the mid-nineteen fifties linguists sought to examine unknown, exotic languages and document their phonology and syntax. In this structuralist school, dominated by Boas and later Bloomfield, synchronic linguistics involved the hard science (Sampson, 1980) study of a wide range of individual languages. Indeed Bloomfield (1914) advocated "an inflexible discrimination between mere surmise and scientific certainty" (p. 319). In the view of the structuralists, logic and true/false decisions should govern the documentation of the details of a given language. Bloomfield (1930) frequently referred to linguistics as a science, arguing that the work of Pavlov showed that science is not restricted to the purely physical domain. It is not surprising, then, that the extreme side of this school of language subscribed to a mechanist, behaviourist attitude, which saw language as a stimulus-response phenomenon. These guiding principles encouraged a searching for "objectively describable operators .and

concepts" (Robins, 1990, p. 233), and hence a neglecting of semantics. Indeed, Robins comments that the structuralists had a "limited taxonomic objective" (p. 251).

A great improvement occurred in the mid-nineteen fifties as Chomsky (1957) began to criticise descriptivist accounts of language and sought to understand the mental processes which govern our linguistic knowledge. His mentalist position tried to get inside the mind (Robins, 1990) and discover how language is organised in the brain, and how in our everyday use we put sentences together. Chomsky's Syntactic Structures (1957) was very much a product of its time, claiming that any language could be reduced to a system of rules, a finite number of which could generate an infinite number of sentences. This and the later government and binding theory (Chomsky, 1988) involve the reduction of human language to a generative system. This fundamentally logico-mathematical approach has made of language what it is not.

Sampson (1980) attacks the Chomskyan position, saying that it places too much emphasis on extracting abstract rules from language, and has no place for descriptive work at all. Chomsky himself clearly states that "grammar is autonomous and independent of meaning" (1957, p. 17); both Syntactic Structures and the later government and binding model (Chomsky, 1988) contain complex mathematical rules for English. Although his view is mentalist and in his own opinion a branch of cognitive psychology (Chomsky, 1988), Chomsky also claims that there is a special language faculty or universal grammar which is independent of the rest of the human cognitive apparatus, thus denying a role for analogy and metaphor. In short it may be said that although the generative interpretation of language is mentalist, in that it goes beyond simple surface descriptions, in many ways its denial of meaning and requirement for strict rules identify it as merely an extension of its structuralist ancestor.

An increased flexibility in the understanding of language, coupled with the emergence of serious difficulties in the generative approach led in the late sixties and seventies to research into case and grammatical roles in sentences. This movement

towards examining the communicative purpose of language has resulted in several functionalist schools (Fillmore, 1968; Li, 1976; Halliday, 1985), whose approach is in opposition to Chomskyan formalism.

3. An Introduction to Cognitive Linguistics.

Developed from the functionalist school of linguistics in the early 1980s is the newer approach described as cognitive linguistics. Although the number of linguists working in this field has increased in recent years, it is still fair to say that cognitive linguistics owes its theoretical foundations to Lakoff and Langacker. This introduction to cognitive linguistics will thus focus on the work of these two scholars.

In his classic work Women, fire, and dangerous things (1987) Lakoff examines the nature of human categorisation and the implications for linguistics. He attacks what he calls the classical view of binary categorisation, arguing that the more realistic natural categories exhibit gradation of membership and fuzzy boundaries, so-called prototype effects. He further investigates how categories are organised and proposes a novel approach to linguistic analysis based on this. Early in his book Lakoff introduces "centrality", the phenomenon that some members of a category represent that category better than others. He also believes that a given word can have several related meanings (polysemy) because new meanings can be derived from old ones by extensions. For example, if a category has a member A, some feature of this might allow the addition of a new member B. Later, a different feature of B causes another member C to join the category, even though there is no clear connection between A and C. Lakoff describes this process as "chaining", and believes it has a significant part in the development of language. Vitally important is the idea of metaphor, in which it is claimed concepts are used automatically, without being calculated or built up from simpler constructs. Lakoff seeks to connect these related ideas together as some kind of cognitive model.

He says that our thought is organised by cognitive models, which play a role in the formation of categories and in our general reasoning processes. These models are "embodied with respect to use" and so are used without "noticeable effort" (p. 13). From this, Lakoff claims that polysemy arises because we make inter- and intra-cognitive model parallels. To show the importance of categorisation and prototype effects in linguistics, Lakoff refers to several previous studies.

He quotes Ross (1973) as saying that prototype effects can be seen in almost every syntactic category in English. In addition, Van Oosten (1984) established that the role of agent is a natural category with central and peripheral members. Lakoff summarises that "things...close to prototypical members will most likely be in the category and be relatively good examples". Also, "boundary areas will differ from language to language" (p. 65). The last point is important, as it shows that categorisation is language-based, rather than objectivist. Even at the clause level, natural category effects can be observed. It is claimed that simple active declarative clauses are prototypical, while other types, such as questions, passives, and existential there sentences are variations away from the centre.

In the light of this brief introduction to linguistic categorisation, Lakoff suggests that there is needed a fundamental change in how we look at cognition in general and language in particular. The basis for our understanding should be the idealised cognitive model, or ICM. He says that ICMs give structure to knowledge, and that the nature of categories and the existence of prototype effects are direct results of the working of ICMs. An ICM is "a complex structured whole, a gestalt, which uses four kinds of structuring principles: propositional, image-schematic, metaphoric mappings, metonymic mappings." Applying the ICM theory to lexical items, Lakoff shows how categorisation affects our linguistic knowledge. He refers to Fillmore's (1982) example of the bachelor, which begins with the general statement that a bachelor is an unmarried adult man. Immediately, however, complications arise when we consider men in stable long-term unmarried relationships, or grown-up feral children such as Tarzan, or even the Pope. Although

these are all technically bachelors they do not represent the category very well. Lakoff comments that the gap between the general category description and the individual members is caused by a certain lack of fit between the case under consideration and the ICM associated with the category. This notion of fit is of course alien to classical categorisation.

From this simple example, the discussion moves on to one of Lakoff's most important contributions to cognitive linguistics: the radial structure. Radial structures have one or more central members, from which others are chained off by various means of extension. To clarify this idea, Lakoff describes in great depth the category *mother*. The central member of this category is the woman who gave birth to the child, nurtured it, gave half the genes, is married to the father, and so on. From this, chainings include foster mothers, surrogate mothers, and genetic mothers, who are derived from the central example by extension. There are also mothers in other (non-European) cultures who may give their children to another female relative. Lakoff describes mother as a "radial structure...where there is a central case and conventionalised variations on it which cannot be predicted by general rules" (p. 84). The last point is significant: although we can with hindsight follow the development of a category, we cannot use general or generative rules to predict how it might grow and expand.

A more immediately relevant example of a radial structure is provided by Downing (1984), who finds that the nouns associated with the Japanese noun classifier *hon* (本) form a radial category, expanded by extensions of the types mentioned above. The classifier *hon* is typically used with "long, thin objects: sticks, canes, pencils, candles, trees, ropes, hair, etc." (Lakoff, 1987, p.104). Of these, rigid, long items are the most central members of this classifier category. Lakoff describes how other nouns have been added to this group by extension. *Hon* is also used for martial arts contests (kendo) which use long, thin staffs or swords; straight baseball hits; rolls of tape, which are long and thin when stretched out; telephone calls, by some sort of conduit metaphor; TV programmes; movies,

presumably akin to tapes; and injections, because the needle is long and thin. Here it can be seen that the category has been expanded by metaphoric and metonymic extension. Also, image-schematic extension allows straight, but not foul baseball hits to be placed in this category.

Lakoff's proof of the reality of natural categorisation and its presence in human language leads him into a long philosophical discussion, whose details need not concern us here. However, several of his main points are of interest. He argues that language employs models which parallel non-linguistic knowledge, thus denying the separation inherent in the generativist model (Chomsky, 1957). In addition, he believes that our symbolic, cognitive models give us an internal apprehension of the world which is not independent of our own thought. Our viewpoint is to some extent subjective, and objectivist views of cognition and language are incorrect. For this reason, classical categorisation is flawed when it forces us to break down our world into binary, or in-out categories. It will be seen later that the insistence that categories have clear boundaries, and that all members of a category are equally good examples of the group, has caused problems in linguistic analysis, and particularly vis-a-vis the ba-construction in Chinese.

The classical view of categorisation has in the same way led us to develop a very atomistic view of the world, in which everything must be broken into its smallest parts to achieve full understanding. Lakoff argues strongly that we cannot employ atomistic, feature-based systems to represent our internal knowledge of the real world. We must use gestalts, which bring with them metonymy and metaphor. An important aspect of gestalts is the ability of our minds to use a salient part to represent the whole. Lakoff claims, on the basis of his non-objectivist agenda outlined above, that "metonymic models do not mirror nature" (p. 204). Rather, they take part of an entity and use this to identify it, as in his example of a waitress talking about the ham sandwich who spilled beer on himself. Thus, metonymy is incompatible with objectivist models of cognition.

Equally problematic for the atomistic viewpoint is the existence and common use of metaphor. Discussing cognitive semantics, Lakoff describes several schemas which operate in cognition and linguistics. His container schema invokes the status of inside or outside, as in or out of sight. Part/whole schemas are based in our experience of our bodies, and link schemas are seen in expressions such as make connections and break social ties. Other schemas mentioned are centre-periphery, source-path-goal (go a long way to achieve something and get sidetracked), up/down, and front/back. All of these metaphorical schemas are very common cross-linguistically.

The conflict between classical and natural categorisation is illustrated very clearly by the issue of polysemy. The classical view cannot account for polysemy because it requires that the different uses of a word must share a meaning at some level of abstraction. Unfortunately, a suitably abstract meaning is usually empty and has no real connection with any of the common uses. If all the related meanings of a word are examined from this point of view, then the result will be homophony. Also, classical categorisation theory cannot identify (or even tolerate) a central member. Lakoff prefers to talk about polysemy in terms of radial categories, such that the meanings of a given word are chained one from another. As an example he quotes Fillmore (1982), who says that *long* has two meanings, one spatial and one temporal. Of these the spatial sense is the more prototypical, and temporal usages are related to the spatial use by metaphor.

Lakoff's view is thus that we should "view lexical items as constituting natural categories of senses", and that some senses will be "more representative" (p. 417) than others. Supporting this interpretation of categorisation is the case study of the word *over*, originally carried out by Brugman (1981) and refined by Lakoff. There are, according to Brugman, more than 100 uses of *over*, the most common of which are illustrated by Lakoff's (1987, p. 418) examples below.

[1.1] The plane is flying over the hill.

[1.2] The painting is over the mantle.

[1.3] Sam is walking over the hill.

[1.4] The wall fell over.

[1.5] Sam turned the page over.

[1.6] She spread the tablecloth over the table.

[1.7] Do it over, but don't overdo it.

It is claimed that the central sense of *over* is the combination of "elements of both above and across" (p. 419) in the first sentence [1.1]. Other meanings chained off from this include: *above*, as in example [1.2]; covering, a multiplexed *above*, example [1.3]; reflexive, *over* itself, example [1.4]; excess, *over* a certain limit or amount, second use in example [1.7]; repetition, where a task is an obstacle we have to climb *over*, like a hill, so doing it again means go over it again as in the first use in example [1.7]. There are also metaphoric uses of *over*, such as Lakoff's control usage in *She has a strange power over me* (p. 435).

The same conclusion is reached by Dewell (1994) in his improvement on Brugman's (1981) study. He uses the same governing principles, except that for him the central schema for *over* is an arc-path schema, as opposed to the across trajectory of the earlier analysis. He claims that this allows the use of an exclusively image-schematic model of *over*, and describes in detail how chaining has worked in the generation of today's radial category of meanings from the original central case.

Other scholars have looked at similar phenomena in other languages, finding that in each case the lexical item shows polysemy, and that radial categories are the rule. A further illustration of polysemy is Lakoff's (1987) study of *there*, a very detailed "alternative to standard theories of grammar" (p. 462). In setting up the parameters of his discussion, Lakoff asserts that generative grammar is a formal syntactic framework which operates on the elements of language with no consideration of meaning, and thus by

definition adopts an objectivist perspective. By contrast, cognitive grammar uses radial categories to relate the forms of language to cognitive models, a process facilitated by looking at meaning. With this approach, Lakoff claims that the objectivist view is wrong; syntax, syntactic relations, and the lexicon are not independent, but form a continuum. Furthermore, grammatical constructions should be treated as complete wholes and cannot be divided and analysed as separate parts.

Lakoff's study seeks to show the relation that obtains between the two principal uses of *there*, the deictic and existential.

[1.8] Deictic: There's Harry with his red hat on.

[1.9] Existential: There was a man shot last night.

Without examining in great depth Lakoff's arguments, we can establish the following points. The deictic meaning, itself a radial category of subconstructions, is the more prototypical meaning, because we can see and point to objects around us. From this is chained the main existential meaning, along with its attendant subconstructions. Lakoff supports his argument with detailed descriptions of the ICMs for the deictic and existential uses of *there*, which show how one meaning is derived from the other by category extension.

Much of Lakoff's work concerns the theoretical underpinnings and applications of natural or fuzzy categorisation to linguistics. In the short space available in this section it is impossible to even begin to summarise all of this important work. For the work described in this thesis, I employ Lakoff's revolutionary views on language and categorisation as a foundation for cognitive linguistics, to which I add ideas from Langacker, before beginning to construct the edifice itself. Just as the previous paragraphs focused on those aspects of Lakoff's work which are relevant to this thesis, so the following portion introduces only those ideas of Langacker's which relate directly to this investigation of *ba*[3].

Langacker's (1987) collection of case studies constitutes a wide-ranging application of cognitive linguistic theories to cross-linguistic material. Much of his approach is in common with that of Lakoff (1987), as his introductory comments show. Langacker states that grammatical structures are symbolic in nature, and function to express the "conventional symbolization of conceptual content" (p. 1). This symbolisation operates in an environment where lexicon, morphology, and syntax are in fact a continuum, rather than separate components. Commenting on approaches to syntax, he makes the bold statement that "it is...as pointless to analyse grammatical units without reference to their semantic value as to write a dictionary which omits the meanings of its lexical items" (p. 1).

In examining grammatical constructions from this perspective Langacker notes that one of the participants is usually afforded a special central status because we tend to organise data in accordance with a figure/ground scheme. This central participant is termed the trajector, while other cognitively salient players in the relation are landmarks. He says that although these terms come from consideration of "prototypical action verbs" they can be used for any verbs or "relational expression" (p. 10). Langacker believes that a similar asymmetry operates when we use a given grammatical construction or morpheme in communicating our thoughts. We choose a "particular image" or schema to organise our perception of a situation and highlight a given part of a predication in a process he calls "profiling". Langacker states explicitly that the kind of image used, or even the choice of what is profiled will be different across languages. The grammar of a language is thus an inventory of schemas which can be used to organise information. The scope of a predication includes the domains which a schema employs in characterising a given situation. When we encounter new expressions or schemas we are able to assess to what extent they fit into our existing information. This line of reasoning is clearly analogous with Lakoff's (1987) idealised cognitive model concept.

As examples of the operation of schemas in different domains, Langacker looks at count/non-count nouns and the perfective/imperfective aspectual distinction. The fundamental difference within both of these pairs is one of boundedness. Count nouns are bounded in the spatial domain, and perfective verbs are similarly restricted in the temporal. Conversely, non-count nouns and imperfectives show an extension or lack of bounding in their respective domains. Thus Langacker argues that perfectives involve an observable alteration through time with discernible endpoints, while imperfectives are inherently stable. This notion of boundedness is fundamental to linguistic categorisation; different phenomena result from its application in different domains.

Having established these working principles, Langacker employs them in examining various grammatical constructions, among which is the English passive. He approaches this with the view that grammatical morphemes have meaning (often several related meanings), and that this meaning is a vital part of the construction. In addition, the structure of semantics and its role in syntax is language specific.

After rejecting generative explanations of the passive, and providing an eloquent discussion of the role of past participles, Langacker focuses on the status of *by* in passive sentences in English, which is the most appropriate part of his study for this thesis. Following the approach of Hoard (1979), Langacker treats *by*-phrases as oblique components which are not inherently part of the form of the passive. The meanings of *by* (among which is that found in agentive passives) are considered to constitute a complex network or radial category. Langacker uses several example sentences to show the different senses of *by*, with the implication that the central sense is "a stative relation in the spatial domain" (p. 139):

[1.10] The willow tree is by the river.

[1.11] Jack is by himself upstairs.

[1.12] That's OK by me.

[1.13] That sculpture is by Zuniga.

[1.14] He did it all by himself.

[1.15] The applause was by everyone in the room.

[1.16] Bragging by officers will not be tolerated.

He argues that the first two sentences contain a spatial relation *by*, and that the third [1.12] relates a proposition to a landmark who is the person making the judgment. This landmark as source idea is also seen in [1.13] and [1.14], where an action is attributed to a person. Responsibility is further observed in [1.15] and [1.16], where the use of *by* is fundamentally the same as that found in the passive. For *by*, as for count/non-count nouns and the perfective/imperfect distinction, the same general schema is operating in different domains with different manifestations. The result is polysemy, where a series of apparently disparate meanings can be seen to have been chained, one from another. A similar chaining is described for *get* in *He got a hammer* and *He got stabbed*; *get* means *to obtain*, and can be extended to include the fulfillment of a goal (by someone).

Mapping from one domain to another is used to explain the occurrence of *go*-verbs as markers of the future in language such as English, French, and German. Langacker believes that some concept of abstract motion results from the application of a movement-through-space metaphor to the time domain. In his example,

[1.17] This milk is about to go sour,

a bowl of milk moves (abstractly) in the time domain, undergoing biochemical changes as it does so. This explanation of future *go*-verbs is but one application of metaphorical mappings across domains.

A different kind of relational interaction is included in Langacker's very important discussion of "active zones" (p. 189). This term refers to the linguistic short-cuts people make when they use a whole to describe a part, or even identify one entity by talking about another. Langacker provides the following examples:

[1.18] Roger blinked.

[1.19] Roger peeled an orange.

[1.20] Roger is digesting

He comments that these sentences are strange because the meanings they seek to communicate are different from what the words themselves actually say. That is, speaking precisely, someone's eyes blinked [1.18], his hands acted to remove the peel from the surface of an orange [1.19], and certain parts of his internal organs and their secretions are working on his most recent meal [1.20]. There is an in-built discrepancy between the active zone or region and the entity profiled by the statement. Langacker claims that such usages are extremely common, stating that the active zone is the centre-stage region of the interaction under consideration. Example two is very similar to one of the example sentences much loved by scholars of the ba-construction; the importance of active zones for the ba-construction will be addressed later in the thesis during the discussion.

Further examples show the varying complexity of active zones and their relationship to the profiled entity:

[1.21] Abernathy is in the bathtub.

[1.22] He has an axe in his hand.

[1.23] Susan has a cigarette in her mouth.

[1.24] I smell a cat.

The first sentence [1.21] suggests that a large part of the individual is within the confines of the bathtub, which itself represents the amount of water needed to fill it. Sentence [1.22] invokes the idea of a section of the axe handle or possibly the axe-head being held by the hand, rather than being inside the flesh. In the next case [1.23], it is to be hoped that only one end of a lighted cigarette would be in contact with the front part of Susan's mouth. In the last example [1.24] Langacker says that the active zone may not even be part of the noun referred to, adding that we smell what the cat has done, and not the cat itself.

The conclusion here is that the mismatch between profile and active zone can be tolerated because our cognitive systems look at the more salient items. This mismatch

also extends across grammatical classes, resulting in polysemy if a word can be used to profile different active zones of a situation in different domains. Langacker gives the example of *fast* being used to profile one aspect of a trajector (adjective), or the whole process in which it moves (adverb). Similar phenomena exist in certain dialects of American English which use adjectival forms to modify verbs: *He talks kind of slow*. This differential profiling is seen in resultative components in Chinese which tend to focus on the results of actions (Tai, 1985).

The active zone concept is next modified and extended in Langacker's examination of transitivity and grammatical relations, which includes mental actions. He says that there is conceptual content in all syntactic constructs, and that the cognitive models used here relate to experience as living creatures who are "manipulators of physical objects" (p. 210). Indeed, the prototypical agent is a human being who by choice engages in a physical activity which transfers energy to an external object. Langacker summarises this kind of interaction in terms of a billiard-ball model, in which discrete objects move, make contact with each other, and exchange energy.

He then uses this "action chain" concept to explain the prototypical values of subject and direct object, and assert that "in a prototypical transitive clause, the profiled process constitutes an action chain that originates with a canonical agent (volitional energy source) and terminates with a canonical patient (energy sink)" (p. 215). Naturally, there is some variation away from the prototypical action chain, because some processes do not transfer energy, while others occur in mental space or the affective domain as in these examples from Langacker (1987, p.220):

[1.25] Penelope tickled her little sister.

[1.26] They forced him to resign.

[1.27] I urge you to give up that crazy idea.

In [1.25] there is almost no transfer of energy, although the little sister is affected in the sensory domain. In the second situation [1.26] the victim of the action certainly felt

mental or emotional energy and pressure. In the last example [1.27] two verbs are present, both of which involve action principally in the mental realm.

Other non-prototypical cases employ completely mental contact or somewhat passive mental energy sources:

[1.28] I have carefully considered your offer.

[1.29] Several witnesses saw the accident.

[1.30] I noticed a rip in the fabric.

Finally Langacker looks briefly at the nature of agent and patient. Agents can be inanimate forces which put energy into the action chain.

[1.31] The wind blew the door shut again.

[1.32] A flood wiped out the poverty-stricken village.

[1.33] An earthquake woke us up.

Likewise, a direct object can be thought of simply as the entity at the receiving end of the action chain. This broad interpretation of "theme" subsumes the roles mover, experiencer, and patient, but does not specify internal or external change, or whether an action is physical or mental.

The important notions of energy transfer and change of domain are continued into Langacker's study of the relationship between perfectives and possession. He says that verbs of possession are often employed to form perfective constructions. In explaining this phenomenon he states first that possession verbs typically involve "a relationship of direct physical control (e.g. *grasp, hold, keep*)" (p. 337), in which energy is transferred from the trajector to the landmark. As the notion of physical influence is extended to include possession the role of physical energy transfer is reduced; we may have something, even if we are not actually holding it at the time. Langacker's two examples involve potential energy transfer due to ownership: *I have a shovel*, and *I have a bar of gold.*

Although possession is basically abstract, all of these possessive forms include a possessor (who is a reference point) and a target (with which mental contact is achieved).

By applying this schema to actions, Langacker says that possessives represent our establishing mental contact with a process and our ability to bring it to completeness. When this is combined with a past-participle the meaning communicated is that the process is finished, and that the result is relevant to the current situation. The importance of this point will be seen later in the thesis when attention is drawn to the fact that the central meaning of *ba*^{3} is *to grasp*, or *hold*.

From this introduction it can be seen that cognitive linguistics views language as part of our general cognitive abilities, rather than as a separate, specialised system. Our understanding and use of language is inextricably linked with our knowledge and experience of the world. In particular, just as we apprehend our world in terms of natural categories which have fuzzy boundaries and exhibit gradation of membership, so we represent linguistic knowledge in the same way. In addition, as Langacker especially has shown, the structure of linguistic expressions is rooted in salience and our perception of our environment. The implication of these principles is that meaning is very important in language. The division of language into semantics, syntax, and phonology is artificial; semantics is vital to any examination of syntax, as will be demonstrated in this study. This review of foundational literature of the discipline of cognitive linguistics has described the main tenets of the approach, showing how substantially it differs from other tools of linguistic analysis. I shall next introduce the different chapters of the thesis.

In this chapter the basic ideas of cognitive linguistics have been described as they relate to the present study. In Chapter Two the Chinese word *ba*^{3} (把) will be introduced. Its functions as classifier, verb, noun, and in the so-called disposal ba-construction will be discussed. Wang Li's (1947) study will be employed to present the ba-construction as this was the first modern linguistic analysis of the disposal meaning of *ba*^{3}; also, almost every later study orients itself according to the extent of its author's agreement or disagreement with Wang Li. Chapter Two also includes some of the more important diachronic studies of *ba*^{3} and finally formulates some defining questions which were used to guide this thesis.

Chapter Three is a review of literature, most of which concerns the ba-construction. It contains studies and articles which look at *ba*^{3} from the structuralist, generativist, and transitivist viewpoints. As well as examining and evaluating previous treatments of *ba*^{3}, the literature review includes some of the latest applications of cognitive grammar as they relate to the word and its different functions. In Chapter Four is outlined the *ba*^{3} holding schema, which is derived from the basic meaning of *ba*^{3}, *to hold* or *handle*. It is argued that the idea of holding (and *hand*) is extended in Chinese and other languages from the physical domain to the control domain, which allows *ba*^{3} to include the notion of controlling or influencing and thus disposal, as in the ba-construction. Chapter Five builds on the concept of control and the holding schema and details a short study in which sentences containing the ba-construction were taken from modern Chinese literature. These sentences were analysed according to criteria set out by Wang Li (1947) in Chapter Two. From this study was derived a prototypical ba-construction sentence; at this point problematic ba-sentences were explained as deviations from the prototype, acceptable and even to be expected from a cognitive linguistics view of language. Chapter Six brings together the findings of the study of ba-sentences with the claims of Chapter Four and reviews the implications of this study in terms of the guiding questions stated in Chapter Two. This chapter summarises the ideas in this thesis and makes some general comments for future work and possible applications of this study for language teaching.

Chapter Two.

The Different Uses of *Ba*^{3}.

To provide the reader with an introduction to *ba*^{3} (把) and its various uses, I shall briefly describe the form and function of Chinese classifiers, and then introduce the noun and verb uses of *ba*^{3}. Next, I will describe the basics of the Mandarin ba-construction, and follow this with a summary of Wang Li's (1947) definitive paper. Finally, I will briefly examine research on the diachronic development of the ba-construction before posing a series of questions which will guide the development of this thesis.

Before describing the different functions of *ba*^{3} I shall give a brief typological introduction to Chinese as appropriate to this thesis. Chinese is a member of the Sino-Tibetan language family, and is composed of several dialects, of which the most widely spoken and politically most important is Mandarin, the dialect of Beijing. The word order is SVO. Li and Thompson (1990) comment that Chinese has very simple morphology, and almost no inflectional morphemes. The language does employ derivational morphemes and compounding; indeed, two thirds of the vocabulary of modern Mandarin is comprised of polysyllabic words. Chinese makes great use of suffices, to mark aspect on verbs, location, and possession. In this study, all Chinese words are romanised following the *hanyu pinyin* system of the China mainland; the four tones of standard Mandarin are marked 1 to 4 by superscripts at the end of each Chinese word. The small number of words spoken with the so-called *light tone* do not carry any numerical tone marking. Abbreviations for certain morphemes such as aspect markers and possessive markers are explained in Appendix A. English translations of Chinese words, unless otherwise stated,

come from the Concise English-Chinese Chinese-English Dictionary (1987). The following examples are from Li and Thompson (1990, p.822).

[2.1] 我吃了三碗飯。

wo^{3} chi^{1}le san^{1} wan^{3} fan^{4}.

I eat-PER three bowl rice.

I ate three bowls of rice.

[2.2] 她在床上。

ta^{1} zai^{4} chuang^{2} shang^{4}.

she LOC bed upon.

She is on the bed.

[2.3] 我的汽車

wo^{3} de qi^{4}che^{1}

I POSS car

My car

In Chinese, adjectives behave very similarly to verbs, especially as there is no copula between subject and adjective. Also, topic-comment constructions occur frequently, producing sentences of the form:

[2.4] 加州氣候好。

jia^{1}zhou^{1} qi^{4}hou hao^{3}.

California climate good.

California, its climate is good.

A further characteristic of Chinese which is relevant to this study is its use of "resultative verb compounds" (Li & Thompson, 1990, p. 818). In these constructions the first part refers to an action, while the second describes the resultant state of the patient of that action. Examples (from Li & Thompson) of this kind of compound are *da^{3}po^{4}* (打破), *hit-break*, meaning *hit with the result that it is broken*, and *ma^{4} ku^{1}* (罵哭), *scold-cry*, *scold with the result that he or she cries*.

1. Classifiers and *Ba*^{3}.

Classifiers (or *measure words*) are a common feature of many Asian and African languages. These lexical items are usually found in numerative or demonstrative expressions, such as *two cats* or *those dogs*. Such expressions in classifier languages have three elements: numeral or demonstrative, classifier, noun. Although the order of these constituents may vary across languages, all three must be present. Allan (1977) asserts that classifiers "denote some salient perceived or imputed characteristics of the entity to which an associated noun refers" (p. 285). This relationship between nouns and classifiers results in semantic groupings such that the nouns associated with a given classifier often share some common feature or features, such as shape, orientation, usage, or status.

Chinese employs classifiers of nouns and verbs, although the former usage is the predominant. In classifying nouns, Chinese inserts a noun classifier between the numeral or demonstrative and the noun under consideration. The general form is thus: NUM/DEM CLF NP. Some examples of this follow; classifiers appear in bold type.

Numerative:

[2.5] 兩個人

liang^{3} **ge^{4}** ren^{2}

two CLF person

two people

[2.6] 九條魚

jiu^{3} **tiao^{2}** yu^{2}

nine CLF fish

nine fish

Demonstrative:

[2.7] 這張桌子

zhei4 **zhang1** zhuo1zi

this CLF table

this table

[2.8] 那隻狼

nei4 **zhi1** lang2

that CLF wolf

that wolf

As can be seen in these two types of utterance, the classifier depends on the noun in the phrase. Modern Chinese has about such 40 noun classifiers (Chao, 1968) in common use, each of which is associated with a general semantic field. Most Chinese grammars (Li & Thompson, 1981; Chao, 1968) discuss the syntactic function of classifiers and give short lists of some of the common nouns with which a given classifier usually occurs. Chao mentions that the classifier *ben3* (本) is used for books, *feng1* (封) for letters and other items which can be sealed, and *li4* (粒) for small, grain-sized objects such as rice and sand.

Concerning the assignment of nouns to classifiers, Chao (1968) has possibly the most detailed discussion of any grammar of Chinese. For the classifier *ba3*, he distinguishes between noun classifiers (which he calls "individual measures"), "partitive measures", and "measures for verbs" (p. 585). He translates *ba3* as *takes hold*, and gives the following nouns commonly occurring with this classifier: knife, spatula, axe, fan, chair, scissors. In a similar presentation of noun classifiers, Tiee (1986) follows *ba3* with the phrase "thing with a handle" (p. 15), and mentions umbrella as an example of a noun counted with *ba3*.

Analogous to noun classifiers are Chao's (1968) partitive measures, whose behaviour is almost identical with the former. *Ba3* is listed as a partitive measure, this time

translated as *handful* or *bunch*. As examples, Chao lists chopsticks and peanuts. Thus the phrase *yi¹ ba³ hua¹sheng¹* would be *a handful of peanuts* in English.

The last classifier use mentioned by Chao is for counting verbs, in which the classifier itself behaves as a "cognate object" (p. 617). In this usage, a verb phrase is usually followed by a numerative and the classifier morpheme. The structure is: VP NUM CLF. Examples of verb classifiers follow.

[2.9] 你去叫他一聲。

ni³ qu⁴ jiao⁴ ta¹ yi¹ **sheng¹**.

you go call he one CLF.

Go and give him a shout.

[2.10] 我該去一趟北京。

wo³ gai¹ qu⁴ yi¹ **tang⁴** bei³jing¹.

I should go one CLF beijing.

I should take a trip to Beijing.

[2.11] 你幫我一把，好不好？

ni³ bang¹ wo³ yi¹ **ba³**, hao³ bu hao³?

you help me one CLF, good no good?

Give me a hand, would you?

Here, three different verb classifiers appear. *Sheng¹* (聲)is a noun in its own right, meaning *sound*, and is employed here as a classifier in the counting of instances of calling, because calling involves making a sound. The classifier for trips or journeys, *tang⁴* (趟), is almost always found as a bound morpheme. Chao lists *ba³* as a verb classifier, this time translating it *grip*. It is used as in the examples above, to classify verbs such as *nie¹* (捏, *to pinch*), *qia¹* (掐, *to pinch, nip*), *zhua¹* (抓, *to grasp*), *la¹* (拉, *to pull*), and *bang¹* (幫, *to help*) (Chao, p. 617).

This section has shown the different classifier uses of *ba³*. It is most commonly used as a noun classifier, for objects which are long and rigid, or which have handles. The

classifier also has a partitive use, meaning *a handful*, and is often used to quantify amounts of small objects such as sand, rice, or peanuts or bundles of things which can be carried in one hand, such as chopsticks. Finally, *ba*^{3} is also used as a verb classifier in counting actions which are associated with the hand. These various functions of the classifier *ba*^{3} have in common holding and the hand, a point that will be developed later in the thesis.

It is interesting that in his excellent summary of the meanings and functions of the classifier *ba*^{3} (among others), Chao makes no attempt to link them together in any way. In fact, each time he gives an example of the noun classifier use of a given word, he actually adds a note stating that this is not the same as other uses, such as partitive measure or verb classifier. For Chao, then, these three uses of the same word are totally separate.

2. *Ba*^{3} as a Verb and as a Noun.

Two other uses of *ba*^{3}, as a verb and as a noun, are almost always listed separately from each other and from classifier uses and the ba-construction.

Ba^3 as a Verb.

Chinese characters usually consist of a phonetic component and a semantic radical, which allows the grouping of characters into semantic fields in dictionaries. The word pronounced *ba*^{3} (把) contains on its right hand side the phonetic [ba] (巴), and on the left is a radical which is a modification of the (separate) character for *hand* (手). In Liu's (1978) Chinese-English dictionary, of the 273 different characters listed under the modified hand radical, there are only six which are not used as verbs. The hand radical thus identifies the inherently active verbal nature of words such as *ba*^{3}.

Modern Chinese makes extensive use of monosyllabic and polysyllabic lexical items, and *ba*^{3} is most commonly found in lexical items formed from one or two characters. The following meanings of *ba*^{3} and its compounds were found in a search of Chinese

dictionaries, which are listed in the appendix. As a single character *ba³* is usually translated as *hold, grasp*. Compounds include:

把持	*ba³ chi²*	(*hold-grasp*)	*to control, dominate, monopolise*
把舵	*ba³ duo⁴*	(*hold-rudder*)	*to hold the rudder, helm*
把風	*ba³ feng¹*	(*hold-wind*)	*to keep watch during clandestine activity*
把關	*ba³ guan¹*	(*hold-close*)	*to guard a post, to check on quality*
把酒	*ba³ jiu³*	(*hold-wine*)	*to raise one's wine cup, fill a wine cup*
把門	*ba³ men²*	(*hold-door*)	*to watch the door*
把守	*ba³ shou³*	(*hold-guard*)	*to guard*
把握	*ba³ wo⁴*	(*hold-grasp*)	*to hold, grasp* (*also for concepts*)
把捉	*ba³ zhuo¹*	(*hold-grasp*)	*to seize*

Note that this sample of *ba³* compounds contains words describing not only physical holding but also metaphorical senses of holding such as *control* and *guard*.

Ba as a Noun.

Ba also appears as a noun in one and two character words. Although they are sometimes pronounced in a third tone, most noun uses of *ba* carry a fourth tone, *ba⁴* (把). The use of a tone change to indicate the use of the same lexical item in a different grammatical category is not uncommon in Chinese and will be discussed further in the main body of this thesis. In the same way as for the verbal uses, dictionaries (listed in the appendix) were searched for examples of *ba* as a noun. As a single word *ba⁴* is translated *grip, handle*, or *stem of a leaf, flower, fruit*; pronunciation with a fourth tone is more common in nominal uses of *ba* and so examples with this tone are listed before those with a third tone. In the following examples two diminutive suffices can be observed: DIM1 represents the northern Mandarin *er²* (兒)diminutive, and DIM2 the *zi³* (子)diminutive, both of which mean *son* or *child* when standing alone.

茶壺把兒	*cha² hu² bar⁴*	(*tea-pot-handle-DIM1*)	*teapot handle*
槍把兒	*qiang¹ bar⁴*	(*rifle-handle-DIM1*)	*butt of a rifle*
把子	*ba⁴zi*	(*handle-DIM2*)	*handle*
刀把子	*dao¹ ba⁴zi*	(*knife-handle-DIM2*)	*handle of a knife*
印把子	*yin⁴ ba⁴zi*	(*print-handle-DIM2*)	*official seal*

Compounds based on *ba³* include:

自行車把	*zi⁴ xing² che¹ ba³*	(*self-go-vehicle-handle*)	*a bicycle handle bar*
把柄	*ba³ bing³*	(*handle-handle*)	*a handle*
把手	*ba³ shou³*	(*handle-hand*)	*a grip, knob*
把頭	*ba³ tou²*	(*hold-head*)	*a gangmaster*
把式	*ba³ shi⁴*	(*hold-pattern*)	*skill in a trade*
火把	*huo³ ba³*	(*fire-hold*)	*a torch*

Although most of these words describe physical objects, there is some evidence of metaphoric extension. Skill in a trade could be linked with the concept of grasping a concept, which as mentioned above is *ba³ wo⁴* (把握). Also the gangmaster may be thought of as the foreman, who holds all the workers under his control.

Both the verb and noun uses of *ba³* involve holding and controlling, whether physical or abstract. They suggest that *ba³* is used to describe holding or things that are held; the noun uses can be thought of as nominalisations of the physical action of holding. The examples presented of classifier, verb, and noun uses of the word *ba³* clearly suggest that these are related. This claim will be further developed in Chapter Four.

3. The Ba-Construction.

While the usual form for Chinese sentences is SVO, use of the ba-construction moves the object forward, and shifts the verb phrase to the sentence final position, thus altering the word order to a modified SOV. This is seen in the following example

sentences from Hopper and Thompson (1980, p.274). Sentence [2.12] is the standard form of the utterance, and the second sentence [2.13] shows the effect of using *ba*³.

[2.12] 我賣了我的車子。

wo³ mai⁴-le wo³ de che¹zi.

I sell-PERF I POSS car.

I sold my car.

[2.13] 我把我的車子賣了。

wo³ **ba³** wo³ de che¹zi mai⁴ le.

I ba I POSS car sell-PERF.

I sold my car.

Note how the object NP *wo³ de che¹zi* (我的車子) is in final position in [2.12], consistent with the SVO word order of Chinese, but is moved to middle position in [2.13]. When a sentence is formed using the ba-construction the main verb phrase is moved to final position in the sentence; [2.13] shows that the verb phrase *mai⁴ le* (賣了) has been pushed to the position occupied by the object NP in [2.12]. In short, [2.12] has the form SVO, whereas [2.13] is S *ba*³ OV. Li and Thompson (1981) claim that the meanings of non-*ba*³ and *ba*³ sentences are the same, but stress that certain conditions have to be met before *ba*³ can be used. The complicated requirements for an acceptable ba-sentence concern principally the definiteness of the object NP and the nature of the main verb and will be discussed below in connection with the work of Wang Li (1947).

It is commonly found that ba-sentences have rather complex morphology, adding a complement of some sort after the object:

[2.14] *我把飯吃。

*wo³ **ba³** fan⁴ chi¹.

I ba rice eat.

I ate the rice.

[2.15] 我把飯吃了。

wo^{3} **ba^{3}** fan^{4} chi^{1} le.

I ba rice eat PERF.

I ate the rice.

[2.16] 他把我的手表扔在水裏了。

ta^{1} **ba^{3}** wo^{3} de shou^{3}biao^{3} reng^{1} zai^{4} shui^{3}li^{3} le.

he ba I POSS hand-clock throw LOC water-in PERF.

He threw my watch into the water.

[2.17] 她把流氓從書店裏趕出去了。

ta^{1} **ba^{3}** liu^{2}mang^{2} cong^{2} shu^{1}dian^{4} li^{3} gan^{3} chu^{1} qu^{4} le.

she ba hooligan from book-shop drive-out-go PERF.

She drove the hooligan out of the bookshop.

The first sentence [2.14] is ungrammatical because there is no implication of a completed action. However, the addition of a perfective aspect marker *le* (了) makes sentence [2.15] acceptable. Very common are forms such as [2.16] in which some form of resultative or locative verbal element follows the object. These sentences show how the object NP is affected by the action in the verbal element, summarising its final state or location. For example, in [2.16] the watch ended up in the water as a result of being thrown there by the subject of the sentence. Example [2.17] contains a complex verbal element composed of three verb units together, *gan^{3}chu^{1}qu^{4}* (*drive-exit-go*). This verbal element can be understood to mean *went out as a result of being driven out*, and is clearly of the same general form as Li and Thompson's (1981) "resultative verb compounds", mentioned above.

One of the first attempts to analyse and explain the ba-construction was undertaken by Wang Li (1947). Although his work was later criticised, especially by transformationalists, Wang's view remains the basis for many investigations of the construction. The importance attached to this study is clear from the fact that almost

every study since Wang's makes use of the English term "disposal construction", which is a translation of his Chinese expression *chu³zhi⁴shi⁴*. *Chu³zhi⁴* means literally *to deal with*, or *to handle*, and in this early analysis the original meaning of *ba³* is important in explaining the behaviour of the ba-construction. The basis of Wang's approach is that the ba-construction describes how some person or object is handled or dealt with, or how an action is undertaken. An essential part of this notion is that the action be complete, as shown in the examples below. Within the context of disposal, Wang Li gives a summary of verbal elements that can be used with the ba-construction:

1) Resultative (refers to the whole predicate)

[2.18] 把地毯都弄髒了。

ba³ di⁴tan³ dou¹ nong⁴zang¹ le.

ba carpet all make-dirty-PERF.

Make the carpet all dirty.

Resultative verbal elements summarise the resultant state of the object NP after the subject has dealt with it. These elements often describe general changes of state or status, but do not include statements of where an object was placed or in what direction it was moved.

2) Directional (refers to the whole predicate)

[2.19] 把他也帶了去。

ba³ ta¹ ye³ dai⁴ le qu⁴.

ba he also take-PERF go.

Take him along too.

This type of verbal element is similar to the resultative, but has the restriction that it contains some statement of directionality or change of direction effected by the subject. Often verbs such as *qu⁴* (去 *to go*) and *lai²* (來 *to come*) are found in directional verbal elements.

3) Relational position (refers to the whole predicate)

[2.20] 把那條還我吧。

ba[3] nei[4] tiao[2] huan[2] wo[3] ba[1].

ba that CLF return I PAR.

Give that one back to me.

Sentences of this type involve a direct and indirect object, with a verb describing such actions as giving, transferring, or returning.

4) Numeral + measure.

[2.21] 把他罵一頓。

ba[3] ta[1] ma[4] yi[1] dun[4].

ba he scold one CLF.

scold him 'one round'.

These types of verbal element express a simple completed action which is counted using a verb classifier. They are similar to the examples of verb classifiers given earlier in this chapter, except that, for example, in [2.21] the round of scolding is brought about by the subject (of the imperative).

5) Aspect.

[2.22] 把他得罪了。

ba[3] ta[1] de[2]zui[4] le.

ba he make-sin-PERF.

made him offended.

[2.23] 他把書老拿著。

ta[1] **ba**[3] shu[1] lao[3] na[2] zhe.

he ba book old hold-PERF.

He is always holding that book.

These verbal elements mark the completeness of the action described. Most ba-sentences contain the perfective aspect marker *le* (了), showing a completed action, as in [2.22]. A

small number of sentences, such as [2.23], carry the continuous marker *zhe* (著), specifying an ongoing process. Wang Li's approach to the ba-construction does not address the question of the acceptability of the continuous aspect. The work of Li and Thompson (1981), to be discussed later, extends completeness of action to conceptual boundary, providing an explanation for why certain durative processes can be expressed using the disposal form.

Wang Li (1947) claims that some restrictions follow on from the handling or disposing nature of the ba-construction. He excludes verbs which do not involve a change of state and gives five conditions under which a sentence may not be expressed using the disposal form:

1) Verbs of mental and psychological activity.

[2.24a]我愛她。

wo^{3} ai^{4} ta^{1}

I love she.

I love her.

[2.24b]*我把她愛。

*wo^{3} **ba^{3}** ta^{1} ai^{4}.

I ba she love.

I love her.

This restriction is introduced because mental actions and reactions do not bring about a change in state of the object NP in the ba-sentence. In other words, mental actions do not allow the subject of a sentence to deal with the object in any way.

2) Verbs of perception.

[2.25a]我看見他。

wo^{3} kan^{4}jian^{4} ta^{1}.

I see he.

I see him.

[2.25b]*我把他看見了。

*wo^{3} **ba^{3}** ta^{1} kan^{4}jian^{4} le.

I ba he see-PERF

I see him.

Wang Li argues that verbs of perception do not involve any positive or volitional action on the part of the subject. Thus, in [2.25] there is no suggestion that the subject actually did anything; he would be an experiencer rather than an agent.

3) Verbs expressing activities which have no effect on the object.

[2.26a]我上樓。

wo^{3} shang^{4} lou^{2}.

I go-up storey.

I go upstairs.

[2.26b]*我把樓上了。

*wo^{3} **ba^{3}** lou^{2} shang^{4} le.

I ba storey go-up-PERF.

I go upstairs.

Again, these sentences do not show the subject actually affecting or dealing with the object. No change of state was brought about in the stairs by the person climbing up one floor. In fact, verb-noun combinations such as *shang^{4}lou^{2}* can be considered as one element, *lou^{2}* becoming an inseparable part of the verb phrase. There is thus no potential or requirement for transitivity.

4) Verbs expressing accidental, unexpected events.

[2.27a]我拾一塊手帕了。

wo^{3} shi^{2} yi^{2} kuai^{4} shou^{3}pa^{4} le.

I pick-up one CLF handkerchief-PERF.

I picked up a handkerchief.

[2.27b]*我把一塊手帕拾了。

*wo^{3} **ba^{3}** yi^{2} kuai^{4} shou^{3}pa^{4} shi^{2} le.

I ba one CLF handkerchief pick-up-PERF.

I picked up a handkerchief.

This restriction exists because an unexpected event cannot be thought of as a dealing with or disposing of any kind. Disposal requires that the subject knew what he was doing or at the least was able to influence the object. The accidental finding of an object [2.27] does not fit into such a pattern.

5) verbs *you^{3}* (to have) and *zai^{4}* (to be located at).

[2.28a]我有詞典。

wo^{3} you^{3} ci^{2}dian^{3}.

I have dictionary.

I have a dictionary.

[2.28b]*我把詞典有。

*wo^{3} ba^{3} ci^{2}dian^{3} you^{3}.

I ba dictionary have.

I have a dictionary.

[2.29a]墨水在那兒。

mo^{4}shui^{3} zai^{4} na^{4}er.

ink LOC there.

The ink is there

[2.29b]*墨水把那兒在。

*mo^{4}shui^{3} ba^{3} na^{4}er zai.

ink ba there LOC.

The ink is there.

These examples from Li and Cheng (1990) show that the inherent nature of the verb may also rule out disposal. Having an object implies no change of state and there is no result

of any handling here; similarly, if an object is simply located somewhere (*zai*^{4}) the implied preservation of the *status quo* argues against disposal and the ba-construction.

Wang Li's analysis of the ba-construction is based on the idea of a subject dealing with or disposing of an object. His list of verbal elements and conditions under which the disposal form cannot be used require that ba-sentences should contain the notion of a physical action resulting in a change of state. Also, his approach suggests that the object NP, "handled" by the subject must be familiar to the subject and the person who utters the ba-sentence. His example of the handkerchief, sentence [2.27] shows that accidental actions, including those in which the subject has never seen the object cannot be expressed with a ba-sentence. Further, the "handling" or "dealing" nature of ba-sentences requires that the action be complete, as shown by his verbal elements.

Most discussions of the ba-construction, whether supportive of Wang Li or not, make reference to and use these indirect conclusions of his original study:

1) the verb used after *ba*^{3} should describe some sort of definite action resulting in a change of state;
2) the noun phrase following *ba*^{3} should have a definite referent;
3) the action described by the verb should be a complete one.

4. The Diachronic Perspective.

This thesis takes as its underlying principle cognitive linguistics, which links syntax and semantics with human cognitive behaviour. One important aspect of this approach to language, and many other schools of linguistics, is that information about the changing function or meaning of words over time is often useful in understanding synchronic phenomena. Although this thesis does not attempt to directly address diachronic issues, a brief review will be made of studies documenting the evolution of the ba-construction, to provide an appropriate historical background from which to examine meanings, usages, and categorisations of the word *ba*^{3}.

In the literature of the great Tang period of Chinese history (613-907 AD) can be found examples of the use of *ba*^{3} as a main verb, as well as instances where the word appears to be used as some kind of instrumental. In the opinion of certain Chinese linguists (Bennett, 1981; Her, 1990) the expansion of *ba*^{3} to include disposal and instrumental functions began during the Tang dynasty.

Stimson's (1976) excellent introduction to Tang poetry contains two such examples. One of Li^{3} Bai^{2}'s most famous poems is *Ba*^{3} *Jiu*^{3} *Wen*^{4} *Yue*^{4} (把酒問月), translated as "With some wine in my hand, I put a question to the moon." (p.72). Although the free translation into English gives the suggestion of an instrumental, the Chinese words, literally *hold wine ask moon*, do not clarify the role of *ba*^{3}. Stimson's understanding of an instrumental here does not prevent him from remarking that the meaning of *ba*^{3} is *grasp, have in the hand.*

A similar pseudo-instrumental use of *ba*^{3} is found in Bai^{2} Ju^{1}yi^{4}'s Simplicity's Song, ("Jian^{3} jian^{3} yin^{2}"), a poem about an adolescent girl. In line 3 of the poem we have:

[2.30] 十一把鏡學點妝。

shi^{2}yi^{1} **ba**^{3} jing^{4} xue^{2} dian^{3} zhuang^{1}.

eleven hold mirror learn spot make-up.

At eleven [years of age] she holds a mirror as she learns to apply make-up.

In both of these two poems *ba*^{3} is the verb in a subsidiary clause. In the first example, the main idea concerned talking to the moon; in the second, a girl was applying make-up. At this time then, *ba*^{3} was being employed in an instrumental manner not identical with a role as a pure main verb.

In the work of Du^{4} Fu^{4}, another master of the Tang period, we can see *ba*^{3} used both as main verb and instrumental. Hawkes (1987) discusses Du^{4} Fu^{4}'s poem Bing^{1} che^{1} xing^{2} ("Ballad of the Army Carts"). In line 18 of this poem appears the clause:

[2.31] 總有健婦把鋤犁。

zong3 you3 jian4 fu4 **ba3** chu2 li2.

always have strong wife hold hoe plough.

This is glossed as *even-if there-is sturdy wife handle hoe plough*, while Hawkes' free translation is *though many a sturdy wife turns her own hand to the hoeing and ploughing* (p.7). This action usage (*holding a plough*) is more consistent with the behaviour of *ba3* as a main verb, under which category it is listed in Hawkes' vocabulary as *to hold*.

A similar use is seen in Du Fu's Feng4ji4 yi4 chong2 song4 Yan2 gong1 si4 yun4 ("A second farewell at the Fengji post-station"). Lines 3 and 4 read:

[2.32a]幾時杯重把，

ji3shi2 bei1 chong2 **ba3**,

what time cups again hold,

[2.32b]昨夜月同行。

zuo2ye4 yue4 tong2xing2.

last-night moon together walk.

These two lines are idiomatically translated *How long will it be before we again hold the winecups in our hands and walk together under last night's moon?* (p.113).

In contrast is the use of *ba3* in the poem *Bie2 Fang2 tai4 wei4 mu4* ("Leave-taking at the grave of Grand Marshall Fang"). Line 6 is:

[2.33] 把劍覓徐君，

ba3 jian4 mi4 Xu2 jun1,

grasp sword seek Xu lord,

which Hawkes translates as [*come*] *sword in hand to seek the Lord of Xu2*.

This very brief snapshot shows how flexible Chinese is with regard to categorisation of a word as a main verb or some form of instrumental. The idiomatic translation here takes *[come] to seek* as the main verb phrase. *Ba3 jian4* is thus an adjectival or instrumental phrase, *with sword in hand*, describing the unspecified subject,

or possibly an adverbial, qualifying the manner of coming. Equally possible however is the adoption of *ba³ jian⁴* as the main verb phrase, resulting in the English translation *I hold my sword, seeking the Lord of Xu²*. Chinese does not use any morphological marking to specify which action is the main one, which is in contrast to Indo-European languages such as Latin and Russian, in which a phrase such as *with sword in hand* would be expressed using an ablative and instrumental respectively (Coleman, 1990; Comrie, 1990). As stated by Tai (1989), in such sentences, Chinese focuses on what happened, rather than the exact nature of the process. A Chinese speaker understands by the above line of poetry that someone was holding a sword, and that the same person was looking for Lord Xu²; the order of relative prominence of the two events is not of first importance.

The slightly different functions of *ba³* in the above examples help illustrate a process of evolution involving a struggle between three separate lexical items which was eventually won by *ba³*. In a controversial article, Bennett (1981) describes a process of grammaticalisation in which three words with related meanings (*yi³* 以, *jiang¹* 將, and *ba³* 把) lost their semantic content. He begins with the use of *yi³* (meaning *to use* or *take*) in archaic Chinese (c. 1000 BC) in double-object constructions where something was transferred from one person to another:

[2.34] 堯以天下隅與舜。

yao² yi³ tian¹xia⁴ yu³ shun⁴

yao yi heaven-under to shun.

Yao gave the world to Shun.

Bennett comments that in modern Chinese the same sentence would be *yao² ba³ tian¹xia⁴ gei³ shun⁴*, with *ba³* (把) and *gei³* (給) replacing *yi³* (以) and *yu³* (與) respectively. He invokes a similar parallelism in showing how *yi³* (like *ba³* in the Tang poems above) was used in archaic Chinese instrumentals:

[2.35] 文王以民力爲台。

wen²wang² yi³ min²li⁴ wei² tai².

wen-king yi people-power build tower.

King Wen built a tower with the people's strength.

Bennett also discusses *jiang¹* (將), which for many years was interchangeable with *ba³*. Today it is occasionally used in written Chinese and sometimes signifies disposal in dialects such as Cantonese. He says that in the pre-Tang period, *jiang¹* meant *to take charge of, deliver* and *ba³* meant *to take, hold, use*, but by the Tang period their two meanings had "coalesced" (p.64) into *to take*.

This merging allowed *ba³* (and also *jiang¹*) to take on an instrumental function. By looking at the meaning of *ba³*, Bennett describes how a word with the meaning of *take*, or *use* could be so used and draws parallels with English sentences:

[2.36a] John took a knife and cut the cake.

[2.36b] John used a knife to cut the cake.

[2.36c] John cut the cake with a knife.

He claims that there is a strong semantic connection between *take* words and forms of the instrumental. Bennett mentions Hyman's (1975, p.138) view that *Take the knife and cut the meat* includes an instrumental, which is very similar to Norman's (1988) *ba³ qian² mai³ yao⁴* (把錢買藥 *buy medicine with money*). However, Bennett goes on to state that *ba³* is now no longer used as a main verb at all, having become a "mere object marker" (p.65). Thus, although he notes the connection between *take* and the instrumental, he does not make use of semantics to develop the relationship between the different grammatical categories associated with the same word.

Huang (1986) opposes this notion of grammaticalisation, arguing instead that the modern ba-construction is the result of a series of lexical replacements. He discusses the gradual replacement of *jiang¹* (將)by *ba³* (把) in modern Mandarin. He quotes from a large number of Zen texts to claim that in the Tang period, *ba³* was principally used as a

main verb in simple sentences, *jiang*^{1} was most commonly used in the disposal construction, and that the overlap in their meanings allowed *ba*^{3} to slowly displace *jiang*^{1}. Earlier, *jiang*^{1} had initially replaced the ancient Chinese *yi*^{3} (以) in instrumental uses. For Huang, consideration of diachronic change must involve semantics and function; his approach thus stands in opposition to that of Bennett (1981).

In broad sympathy with Bennett is Sun's (1988) study of the grammaticalisation of three words in Chinese, among which is *ba*^{3}. He says that although *ba*^{3} was formerly a lexical verb, it became a "grammaticalised element" (p. 1) by analogy with *yi*^{3}. Sun next describes some features of the modern ba-construction and relates these to its evolution.

Sun rejects the view of Teng (1975) that the ba-construction is based on a change of state and is temporally bounded, providing three examples.

[2.37] 我把玻璃打破了。

wo^{3} **ba**^{3} bo^{1}li^{1} da^{3}po^{4} le.

I ba glass hit-break PERF.

I broke the glass.

[2.38] 他把我說得很高興。

ta^{1} **ba**^{3} wo^{3} shuo^{1} de hen^{3} gao^{1}xing^{4}.

he ba I talk EXT very happy.

He talked in such a way that I became very happy.

[2.39] 他把槍口對著我。

ta^{1} **ba**^{3} qiang^{1}kou^{3} dui^{4}zhe wo^{3}.

he ba gun-mouth face-DUR I.

He was pointing the muzzle of the gun at me.

Although the first example is a prototypical ba-sentence, Sun uses examples [2.38] and [2.39] to show that the ba-construction does not mark temporal boundedness because in [2.38] there is no perfective and in [2.39] there is a continuous aspect. He believes instead

that the ba-construction usually employs the particle *le* because it is primarily a causative marker.

He suggests that much of the confusion surrounding the ba-construction has arisen because researchers misunderstood the "inherent temporal properties of Chinese verbs" (p. 146), the aspectual differences between verbs which derive directly from their meanings. He identifies four categories of verbs, and gives examples from Vendler (1967).

1) Activity: *run, walk, listen to.*

2) Accomplishment: *paint a picture, build, kill, put.*

3) Achievement: *recognise, find, understand, see.*

4) State: *know, love, be tall, see.*

According to Sun there is a mismatch between the type of a verb in Mandarin and in English. For example, in English *kill* is an accomplishment, but Chinese *sha*^{1} is an activity verb, which requires extra morphological marking to show accomplishment. He argues that the use of perfective marking (the *le* suffix) is acceptable with accomplishment verbs, but other verbs (activity for example) require an extra resultative compound. Sun also says that in modern Mandarin most monosyllabic verbs are activity, state, or possibly achievement verbs, but do not include any from the accomplishment group.

Against this background, Sun's conclusion is that "the ba-construction is a causative type construction which requires an accomplishment type predicate" (p. 185); this kind of predicate is constructed by adding an aspect marker (*le*) or a resultative compound, depending on the nature of the main verb after *ba*^{3}. The accomplishment notion here requires that the ba-construction is bounded not temporally, but by a given state of affairs.

Although he utilises some kind of conceptualisation idea in looking at aspect and the role of *le*, this flexibility is not seen in his attitude to the following sentences. Treating *ba*^{3} and *jiang*^{1} as functionally the same, Sun claims that in this example *jiang*^{1} is only a patient marker,

[2.40] 誰將生死與汝？

shei^{2} jiang^{1} sheng^{1}si^{3} yu^{3} ru^{3}?

who jiang life-death to you?

Who (would) give you (his) life?

This is because it is impossible to actually hold your life literally in your own hands! Also, the application of schemas and polysemy could have removed Sun's concern over the status of *jiang^{1}* as verb or patient marker in the following examples.

[2.41] 師將鍬子剷草次。

shi^{1} jiang^{1} qiao^{1}zi chan^{3} cao^{3} ci^{4}.

master jiang span cut grass time.

When the master held a spade to cut the grass.

In Sun's opinion this is a clear verbal use of *ba^{3}*, but in the next sentence, whose English gloss is missing, he admits that there is a problem because it can be read either way (the writing of jiang as *ba^{3}/take* is from Sun).

[2.42] 將飯與人吃。

jiang^{1} fan^{4} yu^{3} ren^{2} chi^{1}.

ba^{3}/take food give people eat.

He comments that a verbal use of *jiang^{1}* would make the utterance read *Take the food and give it to the others*, while taking *jiang^{1}* as a patient marker would result in *Give the food to the others*. I believe that this distinction is not applicable or even present in the Chinese and only comes about when the sentence is translated into English. Taking *jiang^{1}* and *ba^{3}* to have fundamentally the same meaning, I understand sentence [2.42] to mean *exercise influence on or handle the food in such a way that the people get to eat it.*

Sun's final points concern the status of *ba^{3}* in Early Mandarin and in today's modern language. He states that "homonymy implies unrelatedness, polysemy implies relatedness" (p. 250), and then suggests that the relationship between the various uses and meanings of *ba^{3}* in Early Mandarin was "perhaps closer to polysemy than to homonymy"

(p. 266). He believes that in Early Mandarin a certain iconicity existed, which connected the meanings together, but as *ba³* was grammaticalised the relationship between the grammaticalised form and verbal uses of *ba³* has become more homophonous than polysemous. He goes to say that in a sentence like *wo³ tian¹ tian¹ ba³ men²* (*I guard the door every day*) "although the verb *ba³* is phonetically identical with the grammaticalised *ba³* in Modern Mandarin, semantically they are so different from one another that the relationship between them is more homonymous" (p. 266). In effect, Sun claims that there is no longer any semantic relationship between the verbal meaning and disposal function of *ba³*; these uses merely constitute two words which sound the same only. Because he views *ba³* in the ba-construction as a "grammatical element" (p. 143), he does not seek to establish any relationship between the meanings of the word in today's language. The application of some kind of general schema for *ba³* (to be undertaken in Chapter Four) would successfully demonstrate that relatedness rather than unrelatedness better describes the status of the different meanings. In common with many other analyses, Sun's contains some very useful material which is unfortunately constrained by the underlying classical categorisation model.

Following on from these articles, which adopt different standpoints on the evolution of the ba-construction, Her (1990) attempts to resolve the issue once and for all. He notes that the basic meaning of *jiang¹* is *to take*, justifying this with a quote from Wang Li (1947) of a sentence from before the first century:

[2.43] 無將大車。

wu² jiang¹ da⁴ che¹

do-not take big vehicle

Don't take the big wagon.

He then introduces the disposal construction and instrumental uses of *ba³/jiang¹* with two Tang quotations, also from Wang Li:

[2.44] 將詩摸浪傳。

jiang^{1} shi^{1} mo^{4} lang^{4} chuan^{2}.

jiang poem not waste spread.

Don't circulate the poetry carelessly.

[2.45] 把春嘗酒。

ba^{3} chun^{1} chang^{2} jiu^{3}.

hold spring taste wine.

Pay for the wine with the season of Spring.

Concerning the use of *ba^{3}* and *jiang^{1}* in modern Chinese, Her claims that both have lost their verbal and instrumental functions and now only appear in the disposal construction.

He favours Huang's explanation of lexical replacement, and mentions two very important modes of language change. In the process of functional refinement, Her claims, "a linguistic form with multiple functions is likely to lose some of [them]", and in analogical refinement, "a linguistic form undergoing refinement is likely to be replaced by another form sharing one or more of its functions" (p. 279). Clearly, the second principle specifies that the replacing form can only replace the older form in environments where the meanings of both forms are the same.

Before he outlines his point of view, Her clarifies a very important issue. He states that there are two main groups of classical texts which scholars can use to trace the historical development of *ba^{3}* and *jiang^{1}*. The Tang^{2}ren^{2} chuan^{2}qi^{2} xiao^{3}shuo^{1}, abbreviated to CQ, and the Dun^{1}huang^{2} bian^{4}wen^{2} hui^{4}lu^{4}, BW, are two rather different sets of Tang texts. CQ is written in a traditional, literary style which attempted to employ features of the ancient language, while BW is thought to the first example of written vernacular Chinese.

Looking at the BW, which is much closer to the spoken language of the Tang dynasty, Her found that *jiang^{1}* was frequently used in serial-verb constructions, while *ba^{3}* was usually employed as a main verb. He believes that for *jiang^{1}* the acquisition of

instrumental and disposal functions was complete by the Tang dynasty, while for *ba*^{3} this occurred during that period. In addition, *yi*^{3} was commonly used to mark the instrumental.

Her claims that because *yi*^{3} and *jiang*^{1} shared similar verb functions, *yi*^{3} was probably the precursor of *jiang*^{1}. In the BW many double-object constructions use *jiang*^{1}, whereas in the pre-Tang period they used *yi*^{3}. Later, during and after Tang, *ba*^{3} began to replace *jiang*^{1} in a process that was probably not complete until at least the middle of the Qing period (1644-1911 AD). Their shared meanings of *take* or *hold* made it relatively simple for *ba*^{3} to take over the functions of *jiang*^{1}. Her mentions that in the Yuan (1279-1368 AD) and Ming (1368-1644 AD) period classic Shui^{3}hu^{3} (The Water Margin), *ba*^{3} and *jiang*^{1} are in "full competition" (p. 291). He concludes his sketch by stating that today, *ba*^{3}'s original holding or taking function has been taken over by *na*^{2} (拿).

He explains the complex interactions between these three semantically similar items by means of an analogy with the push/pull behaviour of vowels used by phonologists. These successive replacements show that consideration of semantics is vital to any examination of syntactic change. In summary, Her states that the competing forces of functional refinement and analogous development (of semantics) help maintain language at a roughly constant level of (syntactic) complexity.

The historical development of the modern ba-construction has been given a very cursory treatment in this section of the chapter. Clearly, the process by which *ba*^{3} came to be used in today's disposal construction was very complex, involving competition between lexical items with the same basic meaning of *to hold*. It appears that the disposal uses of these words, *jiang*^{1} (將), and *ba*^{3} (把), and to some extent *yi*^{3} (以) evolved from this idea of holding, possibly through an intermediate instrumental stage (Bennett, 1981; Her, 1990). The development of the disposal use of *ba*^{3} has involved a process of grammaticalisation, although it is my opinion that the *hold* meaning of the word is still very important in this function, as will be shown later in this thesis.

This overview of uses of *ba³* from the classical period until today prepares the reader for the literature review, which examines approaches to modern uses of *ba³*. Bennett (1981) appears to suggest that the meanings of *ba³* form a polysemous network, but then concludes that *ba³* is only an object marker; Sun (1988) is confident that modern main verb and disposal uses are homophonous. On a more positive note, Sun explains that *ba³* is bounded by a state of affairs, and that verb morphology in ba-sentence verbal elements is governed by this general requirement. However, he is unable to accept metaphorical disposal sentences. Several authors advocate consideration of semantics; Huang (1986) says that we need to consider the meaning of *ba³*, *jiang¹*, and *yi³*, while Sun (1988) draws attention to the inherent temporal properties of Chinese verbs. In Chapter Four of this thesis I will present a schema for *ba³* which is based upon the meaning of the word.

5. *Ba³* in the Light of Cognitive Linguistics.

This chapter has attempted to provide a brief introduction to the different uses of the Chinese word *ba³*. In addition, it has shown the treatment of its classifier functions as separate entities by Chao (1968) and the precise statements of Wang Li (1947) concerning the requirements for the ba-construction. In this present analysis of the Chinese word *ba³*, which considers in most detail its so-called disposal usage, the viewpoint of cognitive linguistics is employed to show that such separate treatments of the word are artificial. The different uses of *ba³* are believed to be linked together by its original meaning, *to hold*.

The insights of cognitive linguistics as applied to the above description of *ba³* suggest some questions which will guide my investigation of this Chinese word.

1) Do the different uses of *ba³* constitute homophony or polysemy?

2) What does the ba-construction tell us about categorisation in Chinese?

3) What do the different uses of *ba³* tell us about categorisation in Chinese?

4) What does examination of the ba-construction say about the importance of semantics in consideration of syntax?

5) Is there an autonomous syntax?

While the answers to these questions will frame the main body of this thesis, the review of previous literature will also be undertaken in accordance with this agenda.

Chapter Three.

Literature Review.

Any review of the literature about the ba-construction illustrates how linguistic theory has developed over the years. While almost every previous study of the ba-construction contains very valuable information, most of them hold as a basic premise the idea that logico-mathematical rules can be abstracted from language, and that these rules constitute an autonomous syntax. By considering several different previous approaches to *ba*^{3} (把) in terms of the cognitive grammar concepts discussed in the previous chapter, this section will argue that syntax is a mechanism for organising meaning which is independent of neither semantics nor our apprehension of the physical reality around us. As well as reviewing previous work on *ba*^{3} and the ba-construction, this review will show that such a view of natural language is inadequate.

This review of literature is arranged according to the models of language employed by the authors, and their subject matter. There are thus three broad groupings of traditional studies: structuralist, generative, and functionalist. The review will consider principally the role of *ba*^{3} as an operator in the ba-construction, with reference to its functions as a classifier, main verb, or noun as necessary. The last part of this section will examine several recent applications of cognitive grammar to Chinese.

1. Structuralist Approaches.

In keeping with the general approach outlined in Chapter One, most structuralist studies focus on the form of the ba-construction. Some (Lin, 1981; Lü 1984; Tiee 1986; Li & Cheng 1990) mention that the meaning of *ba*^{3} is *to hold*, and reference grammars

such as Tiee (1986) and Li and Cheng (1990) also include brief descriptions of the classifier *ba³* separate from the discussion of the disposal use. All of these examinations of the ba-construction suggest that the object of the ba-sentence should be a definite NP. In addition they also claim that the ba-sentence should involve a change of state in the object, whose final status is summarised by a complex verbal element in the sentence final position. These observations are in broad agreement with Wang Li (1947) and do refer to his idea of disposal. Although they do not link the form and function of the ba-construction to the meaning of *ba³* or other uses of the word, they provide useful information for the approach in this thesis, as will be shown in Chapter Five.

In one of the earliest papers to look at the ba-construction from a structuralist viewpoint, Lu (1948) asserts that *ba³* is a patient marker which is followed by a definite NP and a polysyllabic verbal unit. Taking a very strict interpretation of Wang Li's (1947) ideas (which were presented in the previous chapter), Lu produces examples of sentences which apparently refute his notion of disposal.

[3.1] 他可以把你恨透了。

ta¹ ke³yi³ **ba³** ni³ hen⁴tou⁴ le.

he can ba you hate-through-PERF.

He could really hate you.

[3.2] 你把這句話再想想看。

ni³ **ba³** zhei⁴ ju⁴ hua⁴ zai⁴ xiang³xiang³ kan⁴.

you ba this sentence speech again think-think see.

Mull over this statement some more and then see.

In these sentences, the verbs *hate* and *mull* do not involve disposal of any form and do not bring about any change of state. It is thus believed that Wang Li's interpretation was too narrow, and his use of semantic information about the word *ba³* was inappropriate.

Chao (1968) expands on Lu's (1948) requirement for polysyllabicity, stating that verbs may add *le* (了 ,a perfective aspect particle), *zhe* (著 , a durative aspect particle) or

a resultative verbal element. In discussing what he calls the "pretransitive" (p. 342), Chao acknowledges that the word *ba³* means *to take hold of* or *grasp*, but states that in the disposal use most of this meaning has been lost and today only a preposition remains. As an example of sentence including the preposition *ba3* and a main verb followed by a resultative expression he gives:

[3.3] 你把飯煮爛了。

ni³ **ba³** fan⁴ zhu³ lan⁴ le

you ba rice cook ruined-PERF

You have cooked the rice soft.

Here *lan⁴le* (ruined) is a resultative element which is joined with the verb *zhu³* (*to cook*). Extending his discussion of polysyllabicity, Chao states that even for many two-character verbs, such as *diao⁴cha²* (調查, *to investigate*), *fen¹xi¹* (分析, *to analyse*), and *jin⁴xing²* (進行, *to implement*) it would be "more natural to add something after the...disyllabic verbs" (p. 349). He mentions that phrases such as *yi¹xia⁴* (一下, *for a while*) can be used or that the verb can be reduplicated, adding a tentative aspect or the meaning of *a little, a bit*. Examples are *fen¹xi¹ yi¹ xia⁴* (*analyse for a while*) and *diao⁴cha² diao⁴cha²* (*investigate a bit*) Alternatively an extent phrase can be attached as in the example:

[3.4] 把水煮了好半天。

ba³ shui³ zhu³ le hao³ ban⁴ tian¹.

ba water cook PERF good half day.

[He] boiled the water for a very long time.

All of these additions to the verb phrase limit the temporal scope in some way. Although Chao does not speculate about the reasons for the polysyllabicity requirement, he does present some useful concepts which will be used in the main body of this thesis.

The requirement for complex verbal elements to follow the ba-object is discussed by Lu (1984). He makes two suggestions concerning these verbal elements.

i) the verb itself can contain a notion of completeness.

[3.5] 把事情辦完。

ba^{3} shi^{4}qing^{2} ban^{4}wan^{2}.

ba matter do-finish.

Get the job done.

[3.6] 把小雞趕走。

ba^{3} xiao^{3}ji^{1} gan^{3}zou^{3}.

ba small-chicken drive-run.

Chase the chicken away.

In both [3.5] and [3.6] the idea of a completed action is supplied by the verb phrase itself. In [3.5] the verb *ban*^{4} (辦) means to do or get done, and to this is added a second verb (完, *wan*^{2}) with the meaning of finish. Thus *ban*^{4}*wan*^{2} describes an action which is complete.

ii) A locational or directional expression can be added,

[3.7] 把書放在桌上。

ba^{3} shu^{1} fang^{4} zai^{4} zhuo^{1} shang^{4}.

ba book place LOC table top.

Put the book on the table.

[3.8] 把這封信帶給小王。

ba^{3} zhei^{4} feng^{1} xin^{4} dai^{4} gei^{3} Xiao^{3} Wang^{2}.

ba this CLF letter carry give xiao wang.

Take this letter to Xiao Wang.

In [3.7] the book was placed in a specific location by the agent, again implying completion of the action. Similarly, in [3.8] the speaker required that the letter be given to Xiao Wang; if his wishes were carried out totally, then this would also be a finished action.

Concerning the definiteness requirement for the ba-object, Lu says that the noun phrase must refer to a specific thing. In the same way, Tiee (1986) believes that we must use determiners such as *zhei*^{4} (這, *this*) and *nei*^{4} (那, *that*) in the NP.

These ideas of definiteness and complex verbal element are then referred to in Lu's discussion of retained object ba-sentences, which have the form S *ba*^{3} NP1 V NP2. In these kinds of ba-sentences the complex verbal element includes a retained object second noun phrase, NP2, which is used in describing the final state of the (definite) main object, NP1. Although most ba-sentences seem to involve a change SVO > S *ba*^{3} O V, there are no S V NP1 NP2 sentences corresponding to those of the form S *ba*^{3} NP1 V NP2. Lu says that there are several types of retained object sentences with different relationships between NP1 and NP2. The summary below is from Lu (1948).

i) NP2 is a part of NP1 or belongs to it in some way,

[3.9] 把雜志翻了幾頁。

ba^{3} za^{2}zhi^{4} fan^{1} le ji^{3} ye^{4}.

ba magazine turn-PERF some leaf.

Flick through (a few pages of) the magazine.

In [3.9] NP2 refers to an object NP which is actually part of object NP1. NP2 forms part of the description of how the subject dealt with NP1; it is linked to the verb *fan*^{1} such that the verbal element *fan*^{1} *le ji*^{3} *ye*^{4} (*turned a few pages*) has essentially become a complete verb in its own right.

ii) NP1 is the patient of the action represented by the verb, and NP2 is the result of the action,

[3.10] 把我當做自己人。

ba^{3} wo^{3} dang^{1} zuo^{4} zi^{4}ji^{2} ren^{2}.

ba I treat-as do self person.

Regard me as one of their own.

Sentences such as [3.10] commonly involve the equation of NP1 with NP2 and include verbs such as *regard as*, *treat as*, and *look upon as*. These refer to mental actions which take NP1, metaphorically speaking, and transform it into or at the least equate it with NP2. A broader interpretation of NP1 being patient and NP2 referring to result would allow this

kind of sentence to represent the general case, where the ba-sentence answers the question *What happened to NP1?* (Thompson, 1973).

iii) NP1 and NP2 are double objects,

[3.11] 把鋼筆還你。

ba[3] gang[1]bi[3] huan[2] ni[3].

ba steel-pen return you.

Give you back the pen.

Although Lu classifies forms such as [3.11] as retained object sentences, because they contain two object NPs, these are in fact different from other sentences of this type because NP2 represents the beneficiary of the action, rather than any kind of patient. For this reason, in this thesis sentences in which NP2 is clearly an indirect object will be classified as direct object/indirect object sentences. Naturally, such forms usually contain verbs such as *give*, *hand over*, and *return*.

iv) NP1 is the location of the action, and NP2 is the tool or result of the action.

[3.12] 把門上了鎖。

ba[3] men[2] shang[4] le suo[3].

ba door mount-PERF lock.

Put a lock on the door.

[3.13] 把爐子上火。

ba[3] lu[2]zi sheng[1] shang[4] huo[3].

ba stove start mount fire.

Get a fire going in the stove.

Examples [3.12] and [3.13] are classified by Lu as location sentences because the meaning as expressed in English contains a preposition and a location. While this is certainly one way of categorising them, this thesis will treat them as general retained object sentences like those mentioned under ii), where there is a patient and a result. In both [3.12] and [3.13] the word *shang*[4] (上) is very difficult to translate; in [3.12] it has the sense of *to*

mount or *attach*, while in [3.13] the idea is to *get a process going* or *under way*. Thus the two examples have the literal meaning in Chinese of *act on the door so as to make it lock-attached* and *deal with the stove so as to make it on fire*. Clearly the second literal translation is reminiscent of Langacker's (1987) active zones.

In the same way as Chao (1968), Lu does not relate the requirement for definiteness of the NP or for a complex verbal expression to the meaning of *ba*^{3}. However, his insights do shed light on the nature of the construction, contributing information which will be used later in this thesis in an integration of syntax and semantics.

Focusing on the nature of the verb and effect on the ba-object, Tiee (1986) comments that the verb must be "active and transitive and must imply a kind of disposal nature" (p.285), in broad agreement with Wang Li (1947) and Li and Cheng (1990). The latter also list the kinds of verbs that cannot be used:

i) Those which do not influence people or things, for example *shi*^{4} (是, *to be*), *you*^{3} (有, *to have*), *xiang*^{4} (像, *to be like*), *xing*^{4} (姓, *to be surnamed*), and *deng*^{3} *yu*^{2} (等于, *to be equal to*).

ii) Sense verbs such as *zhi*^{1}*dao*^{4} (知道, *to know a fact*), *ren*^{4}*shi*^{2} (認識, *to know a person*), *jue*^{2}*de*^{2} (覺得, *to feel*), *ting*^{1}*jian*^{4} (聽見, *to hear*), and *dong*^{3} (懂, *to understand*).

iii) Mental activity verbs including *pa*^{4} (怕, *to fear*), *xi*^{3}*huan*^{1} (喜歡, *to like*), *yuan*^{4}*yi*^{4} (願意, *to be willing*), and *xi*^{1}*wang*^{4} (希望, *to hope*).

iv) Progress or activity verbs such as *kai*^{1}*shi*^{3} (開始, *to begin*), *ji*^{4}*xu*^{4} (繼續, *to continue*), *chu*^{1}*fa*^{1} (出發, *to set out*), *wan*^{2} (完, *to be finished*).

In addition to these points about the ba-construction, Lin (1981), Lu (1984), and Tiee (1986) also describe noun classifiers, among which is *ba*^{3}. That these authors all present the ba-construction and *ba*^{3} as a classifier in separate sections of their books suggests that they *de facto* regard these different uses as homophony.

The structuralist treatments of *ba*^{3} summarised above yield useful information about the forms of the complex verbal elements in ba-sentences, and the requirement for

the object to be a definite NP. The idea that ba-sentences should refer to a physical change (Wang Li, 1947) is clearly more related to the meaning of the main verb in the verbal element; although this was mentioned by several of the studies, this semantic issue was not adequately discussed. Despite their value in producing "raw" material about the disposal uses of *ba*^{3}, these studies are inadequate because they do not integrate the data or attempt to make any connection to the meaning of *ba*^{3}. In addition, the classical principles of categorisation observed in these analyses restrict the scope of the authors' investigations. In Lu's (1948) "refutation" of Wang Li's (1947) notion of disposal, his examples using the verbs *hate* and *mull* are claimed to expose flaws in Wang Li's argument, because they describe mental processes which do not bring about any change of state. This assignment of items to a category on a binary, in-or-out basis, places an unrealistic restriction on his analysis. An interpretation of categorisation as by nature fuzzy, in the manner of Lakoff (1987) would permit the acknowledgment that Wang Li (1947) was broadly correct when he specified what might be termed the prototypical ba-construction. Mental or non-volitional actions could be seen for what the are: chainings from the central usage.

Although these studies share certain structural criteria for the ba-construction, several of them also mention the definiteness requirement for the object of *ba*^{3}, and some of them refer to Wang Li's (1947) disposal concept. Although conforming to the model of language to which they subscribe, they seem somehow to feel that this may not adequately explain the ba-construction. It is regrettable that although Chao (1968) and Lin (1981) both mention in passing the meaning of *ba*^{3}, neither of them tries to include this in their explanations.

2. Generativist Approaches.

Similar structuralist principles are seen in generativist papers about the ba-construction. Although considered a mentalist approach, transformational-generativist syntax is primarily the abstraction of mechanical rules from grammatical structures.

Indeed, Tai (1989) considers Chomsky a structuralist because he only looks at structural aspects of language, with no consideration of their role in the communication process.

As transformationalist syntax flourished and gained popularity, various attempts were made to explain the peculiar characteristics of the ba-construction by recourse to this modified structuralist theory. In almost every study of that period can be observed the tension between the need to force language into a mechanical transformationalist framework, and the knowledge that the ba-construction involves more than can be adequately described by logico-mathematical rules.

In brief, generative approaches to *ba*^{3} concern only the disposal construction, with no treatment of classifier or verb uses of the word. The idea that a ba-sentence of the form S *ba*^{3} NP VP could be derived from a standard S VP NP sentence was very attractive to transformationalists. In formulating and discussing the ba-transformation, *ba*^{3} itself was treated as a preposition inserted at some point during the derivation of the ba-sentence from its non-*ba*^{3} equivalent, presumably analogously to the insertion of *by* when a passive sentence is derived from an active one in English. It was, however, discovered that many ba-sentences did not have non-*ba*^{3} analogues (Hashimoto, 1971), and for those that did, the extraction of a general transformation rule was impossible.

Hashimoto (1971) advocates a *ba*^{3} transformation, suggesting that SVO sentences (the normal pattern in Chinese) and *ba*^{3} sentences are derived from the same deep structure. Although a proponent of the ba-transformation, she admits that problems occur when ba-sentences are compared with their non-ba equivalents. In the following pairs of retained object sentences, the ba-construction forms are structurally similar, having the form S *ba*^{3} NP1 VP NP2. The non-ba forms are mutually inconsistent, one has NP2 as part of NP1 [3.14], while in the other there is a locative relationship between the first and second object noun phrases [3.15].

[3.14a]張三剝橘子的皮。

zhang^{1}san^{1} bo^{1} ju^{2}zi de pi^{2}.

zhang-san peel orange POSS skin.

[3.14b]張三把橘子剝皮。

zhang^{1}san^{1} **ba^{3}** ju^{2}zi bo^{1} pi^{2}.

zhang-san ba orange peel skin.

Zhang-san peeled the orange.

Example [3.14] is fundamentally the same as Lu's (1948) whole/part retained object sentence and represents the type of sentence that is easily transformed from a non-*ba^{3}* form [3.14a] to a *ba^{3}* form [3.14b]. If a transformation did cause [3.14b] to be generated from [3.14a], then it would be easy to describe; it would involve simply the movement of the object NP1 to a position in front of the main verb and the insertion of *ba^{3}* before NP1. Any possessive morphemes linking NP2 to NP1 would be deleted; in many instances the possessive marker *de* (的)can be neglected in non-*ba^{3}* sentences anyway.

[3.15a]張三貼上郵票在信封上。

zhang^{1}san^{1} tie^{1}-shang^{4} you^{2}piao^{4} zai^{4} xin^{4}feng^{1}-shang^{4}

zhang-san stick-put stamp LOC envelope-upon

[3.15b]張三把信封貼上郵票。

zhang^{1}san^{1} **ba^{3}** xin^{4}feng^{1} tie^{1}-shang^{4} you^{2}piao^{4}.

zhang-san ba envelope stick-put stamp.

Zhang-san stuck a stamp on the envelope.

The relatively straightforward transformation to generate [3.14b] from [3.14a] cannot alas be used for [3.15]. Even adding an extra step to take care of the word *zai^{4}* (在), which is a stative verb marking the locative in Chinese, the simple ba-transformation would not produce [3.15a] from [3.15b]. The expected sentence would be *zhang^{1}san^{1} ba^{3} you^{2}piao^{4} tie^{1} zai^{4} xin^{4}feng^{1} shang^{4}*, which is grammatically correct, but not the resultative retained object construction in [3.15b]. If indeed some kind of transformation does generate

[3.15b] from [3.15a], it is not the same as the one presumably responsible for the forms in [3.14]. To describe a ba-transformation is thus more complex than it first might appear. Hashimoto says that this is an unsolved problem, especially with regard to the nature of the deep structure. She concludes that it is difficult to find rules for the behaviour of the ba-construction.

Another study which contains some useful observations about the ba-construction within a predominantly generative framework is that of Cheung (1973). He agrees with many of the structuralists that the "*ba*^{3} element" (p.345) is devoid of semantic content, and that the ba-construction involves "the disposal...of an object with a definite reference."

Cheung believes that there are parallels between the ba-construction and English prepositional phrases, and provides these examples to illustrate his point:

[3.16]	在屋裏	睡覺
	zai^{4} wu^{1}li^{3}	shui^{4}jiao^{4}
	LOC room in	sleep
[3.17]	用手	寫字
	yong^{4} shou^{3}	xie^{3} zi^{4}
	use hand	write words
[3.18]	把鑰匙	忘了
	ba^{3} yao^{4}shi	wang^{4} le
	ba key	forgotten

Each of the examples [3.16] to [3.18] has the basic form PREP NP VP, where PREP denotes a preposition or coverb, NP is a noun phrase, and VP is a verb phrase. Cheung seems to suggest that the preposition (or coverb) in initial position specifies that the action described in the VP has some close prepositional connection with the NP. Thus the sleeping occurred *in* the room, the writing was achieved *using* the hand, and the forgetting occurred *ba*^{3} the key. Adopting this view of *ba*^{3} certainly prevents it from functioning as a main verb, and for this reason Cheung says that *ba*^{3} in the disposal construction (in his

view a coverb or preposition) is not the same as *ba³* as a main verb. Thus, *ba³* in the command *bie² lao³ ba³ zhe men²* (*don't hold the door all the time*), would require a separate entry in the lexicon from the disposal usage. Cheung thus subscribes to the notion that the different uses of *ba³* are homophones.

Huang's (1974) application of a generative analysis to the ba-construction also encountered problems because it did not consider semantics. He stresses the need for structural criteria for the ba-construction, and gives two structurally identical sentences to prove his point.

[3.19] *他把酒喝醉了。

*ta¹ **ba³** jiu³ he¹ zui⁴ le.

he ba wine drink drunk PERF

He drank the wine until it was drunk.

[3.20] 他把腿走累了。

ta¹ **ba³** tui³ zou³ lei⁴ le.

he ba leg walk tired PERF.

He walked his legs until they were tired.

Both sentences are of the form NPsub *ba³* NPobj VP ADJ ASP, where NPsub and NPobj are respectively subject and object noun phrases, VP is the main verb, ADJ is the resultative adjectival, and ASP is an aspect marker. Huang suggests that [3.19] is incorrect because it does not satisfy an NP identity criterion for event causatives; *jiu³* is not identical with the subject of *zui⁴*. However he claims that in the second utterance [3.20], *tui³* is the deleted subject of *lei⁴*. While this argument clearly has value, applicability of the identity criterion itself is actually dependent on semantics, and Huang does not explain how such a criterion fits into *ba³* sentences. Simply looking at the meaning of the words here would immediately reveal something which a structural approach cannot: legs can be tired, but wine cannot be intoxicated.

These papers generally consider *ba³* to be a preposition of some sort, which works

to move the object forward in the sentence. It is usually stated that *ba*^{3} has no meaning, although there is a distant etymological relationship to the idea of doing something with the hands; Cheung (1973) describes two different uses of *ba*^{3} as homophony. Hashimoto (1971) is alone in claiming that *ba*^{3} in ba-sentences is a main verb.

The same author is also the only one to consider the verbal elements which follow the object of *ba*^{3}. She struggles with the task of relating ba-sentences to supposed non-ba equivalents, and concludes that rules cannot explain the differences between them. There is in all these papers no satisfactory analysis of the verb phrase after *ba*^{3}. These difficulties work together to demonstrate that generative syntax cannot provide a comprehensive treatment of the Chinese ba-construction.

The same conclusion can be drawn from Cheung's (1973) comments about the comprehensiveness of the grammatical rules in the transformationalist model, which are immediately followed by statements outlawing transitive verbs of perception. Although some mention is made of selectional restrictions in the lexicon, there is no explanation of the reasons for such restrictions.

3. Functionalist Approaches.

Our understanding of the ba-construction improved greatly when linguists began to add to their examinations of syntax investigations of meaning and roles in the sentence. Although the studies gathered together under the functionalist heading are a little more heterogeneous than those in the previous two sections, the guiding principles here are thematic roles and transitivity. Thus these studies examine the ba-construction by looking at the complex nature of the agents and patients occurring in disposal sentences as well as investigating whether and how the transfer of action from subject to object is expressed by the verbal elements following the object NP.

Problems with the idea that the ba-construction includes a simple objective are discussed by Thompson (1973). She suggests that some consideration of semantics must

be made, and that the notion of transitivity holds the answer to the problem of *ba*³. However, even here she remains sympathetic to the idea of a *ba*³ transformation, stating that some kind of semantic condition must be satisfied before it can be applied.

In this important article she examines retained object *ba*³ sentences and presents a taxonomy of the verbal elements used with the ba-construction. As an easily applicable test for the ba-construction, Thompson suggests a very general condition: "A NP_i may be fronted with *ba*³ if the rest of the sentence answers the question, 'What did the agent do to NP_i?', that is, if it is semantically the 'direct object' of the sentence" (p.220). By way of clarification she gives the following example:

[3.22] 他把紙門踢了一個洞。

ta¹ **ba³** zhi³men² ti¹ le yi¹ge⁴ dong⁴.

he ba paper door kick-PERF one CLF hole.

He kicked a hole in the paper door.

In [3.22] *zhi³men²* is the DO of the whole VP *ti¹le yi¹ge⁴ dong⁴* (*kicked a hole*); whence *dong⁴* (*hole*) is the inner object, and *zhi³men²* (*paper door*) is the outer object. With this kind of example in mind, she refers back to her test question *What did the agent do to X?*, and from this makes two assumptions "1) the verb is an action verb so that its effect 'passes over' to the object, and 2) the object is actual or definite so that the agent can do something to it" (p.377).

This approach invited comment from Cheung (1973), who agrees that these functionalist assumptions are "exactly the two basic conditions for the ba-construction" (p.377), but desires clarification about the relationship between the inner and outer objects. In answer to a question *What did he do to the wall?* Cheung gives two possible responses, one of which he claims causes Thompson's "testing frame" to fail:

[3.23] 他把墙上挖了洞了。

ta^{1} **ba^{3}** qiang^{2}shang^{4} wa^{1} le dong^{4} le.

he ba wall-surface dig-PERF hole PERF.

He made some holes in the wall.

[3.24] *他把墙上填了洞了。

*ta^{1} **ba^{3}** qiang^{2}shang^{4} tian^{2}le dong^{4} le.

he ba wall-surface fill-PERF hole PERF.

He filled up the holes in the wall.

According to Wang Li's (1947) notion of the ba-construction as disposal, involving the dealing with or handling of the object NP, and Thompson's (1973) test question, both [3.23] and [3.24] should describe how the surface of the wall was affected by the subject. Following Lu's (1948) and Thompson's explanation of retained object sentences makes the second object NP, *holes*, part of the verbal element which summarises what happened to the wall. Therefore, [3.23] has the literal meaning *he interacted with the surface of the wall and dug it so that there were many holes*. However, using the logical approach of Thompson (1973), [3.24] has the meaning **he interacted with the surface of the wall and filled it up so that there were many holes*. Sentence [3.24] does not make sense as it could be paraphrased *He took many holes and filled up the wall with them*, suggesting a filling with empty space, opposite in meaning to its English gloss.

The two sentences [3.23] and [3.24] are structurally identical and even show similar case roles for the nouns; they should both constitute answers to a test question of the form Thompson proposed. The issue we should consider here, derived from her test question, is *Can you take a wall and dig it such that holes are the result?* The answer is of course that you can, as stated in [3.23]. But using Thompson's frame for the second sentence [3.24] invokes the question *Can you take a wall and fill it up such that holes are the result?*, which is ridiculous. Unfortunately, in his analysis Cheung neglects the meaning of the verbs. Meaning is vital here: in [3.23] the holes are the result of the

digging, but in [3.24] the holes are not the result of the filling.

It seems that the NP following the V is closer to it than the NP following *ba*³. This is reasonable if we consider that the second NP and V answer the question *What did he do to the wall?* Sentence [3.23] could be shortened in English to *Dug holes in it* with the meaning of *Dug it with holes*, while [3.24] says *Filled holes in it* with the meaning of *Filled it with holes*. It is thus Cheung's argument against Thompson's "testing frame" that fails here, rather than her test. From Thompson's important insight it is apparent that the verb after *ba*³ and any optional noun phrases together form some kind of resultative verbal element. Also, it is clear that her test question *What did the agent do to X?* could be applied to all *ba*³ sentences, and not only retained object forms.

While Thompson (1973) is somewhat sympathetic to a ba-transformation, she makes a very important contribution to the ba-construction debate. Some of her ideas, placed within the context of cognitive grammar, will be developed in the main body of this study.

The importance of the verb in describing what happened to the object NP is also an important theme in Teng's (1975) study. He claims that the verb is of primary importance, quoting Chafe (1970) that it "is the control centre of a sentence, determining by its own internal specification what the rest of the sentence will contain" (p. 165). Teng uses transitivity and the meaning of the verb in ba-sentences to study the nature of the notional subject (or agent), as well as objects and verbal elements.

Teng first looks at the nature of the subjects of ba-sentences. He claims that previous scholars have criticised as too simplistic Wang Li's (1947) notion of disposal, saying that it requires the concept of an agent which is both animate and volitional. For example, *ta*¹ in example [3.25] may be considered a prototypical agent according to Wang Li's (1947) original definition of disposal:

[3.25] 他把蠟燭吹滅了。

ta^{1} **ba**^{3} la^{4}zhu^{2} chui^{1}mie^{4} le

he ba candle blow-extinguish-PERF

He blew out the candle.

The agent of this sentence is a human being who is almost certainly acting with the intention of extinguishing the candle flame. This sentence then, contains a subject which is animate and acting volitionally.

Extending the applicability of the agent role, Teng argues that sentences such as [3.26] are acceptable because they contain an implied agent.

[3.26] 車子把貨運走了。

che^{1}zi **ba**^{3} huo^{4} yun^{4}zou^{3} le.

vehicle ba goods transport-leave-PERF.

The vehicle hauled away the goods.

In sentence [3.26] the suggestion is that there is a human agent , who would use the vehicle as some kind of instrument to move the goods. Because the vehicle cannot move on its own, there must be a human agent motivating the activity described in the sentence.

However, example [3.27] is problematic because there is no implied agent.

[3.27] 風把蠟燭吹滅了。

feng^{1} **ba**^{3} la^{4}zhu^{2} chui^{1}mie^{4} le.

wind ba candle blow-extinguish-PERF.

The wind blew out the candle.

By analogy with [3.26] and because it is inanimate and acts non-volitionally, *feng^{1}* is closest to an instrumental. This kind of sentence should be ungrammatical according to a narrow view of Wang Li's (1947) definition of the ba-construction, because its subject is more an instrumental force than an agent.

To cope with the questions of animateness and volitionality exemplified by sentences [3.25] to [3.27], Teng moves to a higher level of categorisation and employs

what he calls "causer" (p.47), a role subsuming both agent and natural forces. He uses this role because a strict interpretation of Fillmore's (1968) definition of agent as animate has made necessary the use of instrument as a role for inanimate agents. Teng further discusses two types of inanimate agents, those which have an implied agent, and those which do not. He provides the following examples.

[3.28] 這種剪刀不能剪布。

zhe4 zhong3 jian3dao1 bu neng2 jian3 bu4.

this kind scissors NEG can cut cloth.

This kind of scissors cannot cut cloth.

[3.29] 風把樹了吹倒了。

feng1 **ba3** shu4 chui1dao3 le.

wind ba tree blow-fall-PERF.

The wind blew down the tree.

In [3.28] we need an agent to employ the scissors to cut the cloth, while the second example [3.29] contains inanimate force. The notion of agent in Fillmore's (1968) case grammar can thus be broadened for use with the ba-construction. Teng finds i) that a number of slightly different notions of agent can be used with the ba-construction, and ii) that several cases are associated with nouns following *ba3*, showing the necessity of a more flexible scheme of categorisation than has hitherto been used.

Teng uses the same flexibility in tackling the problem of the definiteness requirement of the ba-construction. Teng considers previous claims that the object of *ba3* must be a definite noun simplistic and introduces a modification of Frei's (1956) notions of "actual" and "virtual" (p.102).

A noun is actual if it can be referred to by the speaker, addressee, or both. There must be some knowledge of its existence in the person's mind, though not necessarily in the real world. A virtual noun on the other hand has no reference in anyone's mind. For example, in the sentence *I am looking for a house*, if the speaker is trying to find a specific

house, it is actual because it exists at least in his mind. However, if the speaker is talking, for example, to an estate agent, then it is virtual as the speaker does not have a definite, certain house in mind.

After this introduction, Teng looks at the notions of actual and virtual as they are relevant to the ba-construction. Consider the following.

[3.30a]你去殺一隻雞。

ni^{3} qu^{4} sha^{1} yi^{1} zhi^{1} ji^{1}.

you go kill one CLF chicken.

[3.30b]*你去把一隻雞殺了。

*ni^{3} qu^{4} **ba^{3}** yi^{4} zhi^{1} ji^{1} sha^{1} le.

you go ba one CLF chicken kill-PERF

Go and kill a chicken.

The first sentence [3.30a] is acceptable, but the *ba^{3}* form is not because the noun phrase *a chicken* is not actual; it has no fixed referent in the mind of speaker or listener. From this, Teng produces his criteria for the accusativized object in the ba-construction:

a) It must be actual, for at least the speaker.

b) It must be a patient.

c) In volitional and completed events, an object must be actual at the time of the action.

Although it is clear that the ba-construction requires actual nouns, Teng does not discuss why this is so. Later in this thesis I will attempt to relate this restriction to the meaning of the Chinese word *ba^{3}*.

While Teng's notion of actual and virtual is very useful in examining the ba-construction, his application of it to questions of volitionality is perhaps less satisfactory. For the following example [3.31] he asks whether the action was intentional or not:

[3.31] 我把花瓶弄破了。

wo^{3} **ba**^{3} hua^{1}ping^{2} nong^{4}po^{4} le.

I ba flower-pot make-broken-PERF.

I broke the vase.

He suggests that the breakage was intentional, because the ba-construction requires actual nouns. However, if the knocking over of a vase were non-volitional the person would be a less than prototypical agent, like the wind blowing down a tree. Teng's findings about agents thus point to the existence of a radial category (Lakoff, 1987) of types of agents or causers.

Teng also produces helpful insights about the verbal elements used in the ba-construction. He claims that verbs fall into different types according to the actions they refer to and as examples uses *hit* and *kill*. *Hit* does not imply any change of state on its own, but *kill* does. Some simple verbs which are used to specify goals need a success marker, while others contain a conceptual boundary and thus do not. The same general principle can be applied to complex verb constructions.

Another distinction is that between "inward" and "outward" (p.154) verbs. Teng asserts that *learn*, *buy*, and *come* can only take a source and are thus inward, while the outward *teach, sell, and go* take only a goal. In Teng's example [3.32a] below the verb concerned is *gei^{3}* (*to give*) which is outward, but in [3.32b] *yao^{4}* (*to want*) is inward.

[3.32a] 我把鑰匙給了他了。

wo^{3} **ba**^{3} yao^{4}shi gei^{3} le ta^{1} le.

I ba key give-PERF he PERF.

I gave the key to him.

[3.32b] *我把鑰匙跟他要了。

*wo^{3} **ba**^{3} yao^{4}shi gen^{1} ta^{1} yao^{4} le.

I ba key from he want-PERF.

I asked him for the key.

This inherent directionality is important to a cognitive linguistics view of the ba-construction, because it shows that the object must be in some way under the control of the subject or agent of the ba-sentence. Teng shows that any investigation the ba-construction must consider the nature of the verb used. The concept of verb is not a monolith, but includes several sub-categories of action and directionality. A similar opinion is held by Li and Yip (1979), who mention "degree of dynamism (activeness)" (p.106) in an apparent hint at the existence of a fuzzy category of transitive verbs.

Teng's study demonstrates that each part of the ba-construction represents a fuzzy category of information, and that the ba-sentence must be considered as a whole. Many of his conclusions will be developed in the main body of this thesis.

While not exhibiting the same flexibility with regard to categorisation of the various elements in the ba-construction, Hopper and Thompson (1980) are in broad agreement with Teng's (1975) ideas concerning the meaning of verbs. For them the ba-construction is a "highly transitive clause-type...[and] must show an agent behaving actively, volitionally, and totally upon a definite or referential object" (p.274). In a development of Thompson's (1973) idea that ba-sentences describe *What happened to X?* they also claim that the *ba*^{3} clause must be perfective, specifying the "conceptual boundary of the action" (p.275). The authors leave the details of this important notion intentionally vague, but I believe that conceptual boundary is directly related to the idea of how much an action can influence a patient. Prototypical actions involve changes of state and genuine effects on the patient, but mental actions (Langacker, 1987) should be thought of as non-prototypical members of the action verb category.

This same train of thought continues into the work which has become the standard reference for modern Mandarin, Li and Thompson's (1981) Mandarin Chinese: A functional reference grammar. The authors devote a whole chapter to the ba-construction, remarking early on how difficult it is to be precise about the kinds of objects and verbs that can be used.

Consistent with their functional approach, Li and Thompson next look at Wang Li's (1947) concept of disposal, which for them, is about "what happens to the direct object" (p.466). Thus sentences such as *ta¹ ba³ xiao³ mao¹ ai⁴* (*she loves the kitten*) are unacceptable because we do not know how the cat is dealt with by the girl. Generally, emotion or cognition verbs such as *ai⁴* (愛, *to love*), *xiang³* (想, *to miss*), and *liao³jie³* (了解, *to understand*) do not directly affect their objects in the required disposal manner. However, a complement of degree can make the above sentence acceptable because it brings a sense of bounding to the action:

[3.33] 他把小貓愛得要死。

ta¹ **ba³** xiao³mao¹ ai⁴ de yao⁴ si³.

she ba small-cat love EXT want die.

She loves the kitten so much that she wants to die. (p. 469)

The authors make use of what they call "literal translations" (p.470) in their treatment of retained objects, an example of which follows.

[3.34] 我把他綁了兩隻腳。

wo³ **ba³** ta¹ bang³ le liang³ zhi¹ jiao³.

I ba he tie-up PERF two CLF foot.

I tied up his two feet.

To clarify the relationships between the parts of the sentence, they literally translate [3.34] as *What I did to him was to tie up his two feet.* Even though the grammatical direct object of *bang³* (*to tie up*) is the two feet, what is affected is actually the referent of the *ba³* noun phrase, *ta¹*. Their separation of patient and grammatical direct object in examples such as this is in a sense a precursor of Langacker's (1987) later ideas of active zones and can be imported into a cognitive linguistics framework.

Li and Thompson also claim that although the ba-construction often describes physical influences on an object, it is perfectly acceptable for an abstract thing to be the object of an action. Although they do not explain why abstract objects are permissible, Li

and Thompson do provide the following example.

[3.35] 他把那個問題想了很久。

ta^{1} **ba^{3}** nei^{4} ge^{4} wen^{4}ti^{2} xiang^{3} le hen^{3} jiu^{3}.

she ba that CLF problem think-PERF very long-time.

She thought about that problem for a long time.

The process of thinking in [3.35] is a mental action, which operates on an abstract direct object, the problem. The acceptability of abstract or mental actions is very important for a full understanding of the ba-construction. Their status as non-prototypical actions is supported by the theories of Lakoff (1987), and further explanation is given by Langacker (1987). The question of mental actions is addressed in Chapter Five, where it is found that many ba-sentences contain such non-physical actions and objects.

Many of the ideas of Li and Thompson are helpful in understanding the ba-construction. Their functional approach sheds light on many of the complications associated with *ba^{3}*, as well as on the weaknesses of formalist analyses.

A similarly functional approach is that of Wang Mingquan (1987), who builds upon the ideas expressed by Teng (1975) and Li and Thompson (1981). He very briefly reviews the meaning of *ba^{3}* (and some other lexical items which behave in a similar manner) and some earlier studies, before beginning his own description of the ba-construction.

Wang claims that during the Tang dynasty *ba^{3}* began to lose its semantic content and became a "function word" (p.4). At this time the *hold* or *take* meaning of *ba^{3}* (把) was very much weakened "if not completely lost." At the same time, he also mentions *jiang^{1}* (將, *to do something, to handle a matter*) and *guan^{3}* (管, *to control, to take care of*). *Jiang^{1}* is used in literary Chinese in almost exactly the same manner as *ba^{3}*. *Guan^{3}* (which according to Wang Mingquan means *to take charge*) is now principally used in Beijing dialect, in combination with *jiao^{4}* (叫, *to call*) in sentences such as:

[3.36] 他們管我叫向辰。

ta¹men² guan³ wo³ jiao⁴ xiang⁴ chen².

they guan I call xiang chen.

They call me Xiang Chen.

The three lexical items all share a common meaning of *to hold* or *to manage* or *to take charge of*, and it is indeed no accident that they show considerable overlap in meaning and function. I believe that the erosion of semantic content proposed by Wang is erroneous; the theme of control or potentiality to influence is essential to the ba-construction, and will be developed in this thesis.

After this introduction, Wang Mingquan reminds us of Wang Li's (1947) assertion that the ba-construction cannot describe non-disposal actions, concluding that unless understood in a very abstract sense, the concept of disposal is inadequate. To illustrate his point Wang Mingquan (1987) gives:

[3.37] 他把車誤了。

ta¹ **ba³** che¹ wu⁴ le.

he ba vehicle miss-PERF.

He missed the bus.

This is problematic because there is no disposal of or dealing with of the bus. Wang Mingquan also mentions Wang Huan's (1984) warning against too literal an interpretation of the idea of disposal. She agrees with Song (1981) that in the ba-construction there is a positive effect on the *ba³* object as a result of the action described. Song further claims that the object usually suffers some kind of change, and although disposal describes the relation between verb and object, there is no need for the action concerned to be a purposeful one. Wang (1987) assumes that this broader view can accept such formerly disallowed sentences as:

[3.38] 大風把樹刮倒了。

da4 feng1 **ba3** shu4 gua1 dao3 le.

big wind ba tree blow-fall-PERF.

The strong wind blew down the tree.

Thus [3.38] is acceptable to Wang Mingquan because the object, the tree, clearly undergoes a change. Although the cause of this change, the wind, is not capable of purposeful action, it has dealt with the tree in no uncertain terms.

Unfortunately it is immediately apparent that the insistence on a physical change (irrespective of whether the action was volitional or not) is problematic. Wang Mingquan gives an example of a perfectly good ba-sentence which is eliminated by Wang Huan's (1984) and Song's (1981) newer definition:

[3.39] 他把我上下打量了一番。

ta1 **ba3** wo3 shang4xia4 da3liang2 le yi1 fan1.

he ba I up-down strike-measure-PERF one CLF.

He looked me up and down.

This sentence is disallowed by the requirement for physical change because none is brought about in the object, *me,* by the action of looking up and down. Langacker (1987) has eloquently discussed both physical and mental actions, suggesting that the former is the more prototypical. His ideas and those of Lakoff (1987) will be applied to problematic sentences in the ba-construction later in this thesis.

Another aspect of the Wang Huan/Song view which causes problems for Wang Mingquan (1987) is their position on the question of volitionality. He remarks that unacceptable *ba3* sentences also follow from their broader definition and gives examples (although Wang's translation of the first sentence pair is *I met Liu Xiao*, I believe that in the context of a discussion of volitionality this could be misleading. I have thus changed it to *I ran into Liu Xiao*, which may be more in keeping with the spirit of the Chinese).

[3.40a]我遇到了劉逍。

wo^{3} yu^{4}dao^{4} le liu^{2} xiao^{1}.

I meet-complete-PERF liu xiao.

[3.40b]*我把劉逍遇到了。

*wo^{3} **ba^{3}** liu^{2} xiao^{1} yu^{4} dao^{4} le.

I ba Liu Xiao meet-complete-PERF.

I ran into Liu Xiao.

The verb *yu^{4}* (遇) has the feeling of an accidental meeting. Thus [3.40a] is acceptable because it is not a ba-sentence. However, using *yu^{4}* with *ba^{3}* in [3.40b] produces a contradiction because the suggestion is that the speaker intended to meet Liu Xiao by accident.

[3.41a]我贊成這個建議。

wo^{3} zan^{4}cheng^{2} zhe^{4} ge^{4} jian^{4}yi^{4}.

I approve this CLF idea.

[3.41b]*我把這個建議贊成。

*wo^{3} **ba^{3}** zhe^{4} ge^{4} jian^{4}yi^{4} zan^{4}cheng^{2}.

I ba this CLF idea approve.

I approve of this idea.

Examples [3.41a] and [3.41b] are similar to the previous two because they also focus on the conflict between the intention and volitionality associated with *ba^{3}* and the non-volitional character of the main verb. Here however, the main verb does not suggest that something happened accidentally and was not planned; rather, *approve* is in most cases a non-volitional response to some external stimulus or situation. It is for this reason that *approve* cannot be used with the ba-construction.

It seems that volitionality is a difficult issue. In the first sentence pair, [3.40a] and [3.40b] the idea is that the person did not set out to meet with Liu Xiao, but met him by accident. In sentences [3.41a] and [3.41b] however, I feel that volitionality is not really

relevant. The granting of approval is surely similar to the process of loving someone, it is a natural "gut" reaction, rather than an act of will. Although it can be claimed that a rigid distinction between physical and mental activity is false (Langacker, 1987), it should be stressed that verbs such as *to love* or *to approve* are more reactions to external stimuli than true actions under the control of the individual, who is in effect an experiencer. The applicability of the ba-construction to these situations is a direct consequence of the meaning of the word, as will be shown later.

Wang Mingquan next moves on to argue that instead of looking at the kinds of verbs that can be used with the ba-construction, or definiteness, or polysyllabicity, or any other individual facet, it is vital to consider the sentence as an "interrelated whole" (p.48). To make sense of the various rules which have been advanced concerning *ba*^{3}, and to understand the many apparent exceptions to them, the construction must be viewed in its entirety. To this end, Wang Mingquan took the revolutionary step of gathering native speaker data. In a one-hour corpus of conversational Mandarin from native speakers, he found 77 occurrences of the ba-construction, and a further four instances of *guan*^{3} (管). All of these were used before direct objects. In addition, he mentions sentences which contain what he calls "internal objects" (p.64), giving two examples of the type:

[3.42] 請你把這事寫一個報告。

qing^{3} ni^{3} **ba**^{3} zhe^{4} shi^{4} xie^{3} yi^{1} ge^{4} bao^{4}gao^{4}.

please you ba this matter write one CLF report.

Please write a report on this matter.

[3.43] 請把皮鞋上點油。

qing^{3} **ba**^{3} pi^{2}xie^{2} shang^{4} dian^{3} you^{2}.

please ba leather-shoe place spot oil.

Please apply some shoe polish to the leather shoes.

Both [3.42] and [3.43] are retained object sentences, in which NP2 (the last noun phrase in each sentence) describes what happened to the object noun phrase, NP1. In

[3.42] the matter was handled such that a report was written about it, while in [3.43] the subject interacted with the shoes with the result that polished was administered to them. NP2 thus forms part of the verbal element following the ba-object, NP1. Although other studies break down the verbal elements used with *ba*^{3} into a very precise taxonomy, Wang resists this, saying that "the exact relations expressed by the internal objects may vary, but they all form with the verb a semantic unit which affects the fronted object as a single transitive verb" (p.64). He believes that all of the components are vital to an understanding of disposal. While this holistic view is definitely a step in the right direction, I believe it is necessary to go further: the meaning and use of the ba-construction are inextricably linked with the meaning of *ba*^{3} itself, which is the glue that holds all of the other requirements together.

Wang Mingquan's assertion that actions, but not states, can be transferred from one person to another rules out stative verbs such as *ai*^{4} (愛, *to love*), *pa*^{4} (怕, *to fear*), and *xing*^{4} (姓, *to be surnamed*), as well as *shi*^{4} (是, *to be*) and *you*^{3} (有, *to have*). However, regardless of whether a verb is stative or dynamic, when compounding occurs it is the nature of the compound which is important. Thus, Wang says, although *fang*^{4} (放, *to put, release*) is dynamic, the compound *fang*^{4}*xin*^{1} (放心,*to be at ease*) is stative, and cannot be used in the ba-construction. Conversely, a stative verb such as *love* may become dynamic with the addition of an extra morpheme. Thus [3.44] is unacceptable because it contains the verb *ai*^{4} (愛 , *to love*), whereas the addition of *shang*^{4} (上 , *to begin*) to *ai*^{4} in [3.45] produces a dynamic process which can be described with the ba-construction.

[3.44] *他把 Mary 很愛。

*ta^{1} **ba^{3}** Mary hen^{3} ai^{4}.

he ba Mary very love.

He loves Mary very much.

[3.45] 他把 Mary 愛上了。

ta^{1} **ba^{3}** Mary ai^{4} shang^{4} le.

he ba Mary love-begin-PERF.

He has fallen in love with Mary.

From this Wang Mingquan concludes that the verb in the ba-construction always needs some kind of "perfectivising expression" which specifies "the conceptual boundary of the action" (p.86). He illustrates this with two examples.

[3.46] * John 正在把 Mary 狠狠地打。

*John zheng^{4}zai^{4} **ba^{3}** Mary hen^{3}-hen^{3} de da^{3}.

John right-now ba Mary ruthless-ruthless-ADV hit.

John is beating Mary right now.

[3.47] Don 正把 Mary 往外面推。

Don zheng^{4} **ba^{3}** Mary wang^{3} wai^{4}mian^{4} tui^{1}.

Don right ba Mary towards outside push.

Don is pushing Mary outside.

In the second sentence [3.47] the accomplishment of pushing someone outside constitutes a conceptual boundary. In the first example [3.46] the verb itself has no intrinsic end-point and none is supplied in the sentence, which is why it is an ungrammatical ba-sentence. The idea of conceptual boundary is very important in looking at the ba-construction. Because *ba^{3}* involves a dealing with, or a handling of something, the action must be somehow finite, either intrinsically because of the meaning of the main verb in the sentence, or because suitable verb morphology is attached to make it so.

Wang Mingquan's study addresses several of the core issues related to the ba-construction from a flexible standpoint. He finds many interpretations of disposal too narrow, and advocates a broader understanding of volitionality, agency, and the types of verbs used in the ba-construction. He also suggests that ba-sentences should be understood holistically, with conceptual boundary as a controlling notion.

As might be expected from their underlying emphasis on functionality and transitivity, the studies in this section contain a more powerful and realistic approach to the ba-construction. It is still the case, however, that none of these papers attempt to link the disposal use of *ba*^{3} with its other functions as classifier, noun, or main verb. Every researcher insists on the importance of the meaning of the verbs and complements which follow the ba-object, although none suggest that the meaning of *ba*^{3} is relevant.

Perhaps the most important aspect of the functional-transitivist perspective is that found in Teng (1975) and Wang Mingquan (1987). Both emphasise the need for flexibility in examining the cases governed by *ba*^{3} and the agents of ba-sentences. They also point out difficulties with the categorisation of verbal elements, suggesting that a more holistic view of the ba-sentence must be taken. These studies are able to explain the various requirements for polysyllabicity or perfective aspect markers on verbs by introducing the idea of the conceptual boundary, a principle uniting a set of structural restrictions.

4. Cognitive Approaches.

The last section of this literature review looks at some of the first applications of cognitive linguistics to Chinese, which were presented at a workshop on functionalism and Chinese grammar. The recognition that languages conceptualise differently and make use of different kinds of imagery is a vital component in each. Hsieh (1989) begins with the statement that some languages make more use of iconic symbols than others; some employ many images, while others are more abstract. Although abstract and iconic form the two ends of a continuum which is found in every language, those toward the abstract end tend to rely more on explicit grammatical categories.

For Chinese, which makes extensive use of iconic imagery, Hsieh describes Tai's (1985) Principle of Temporal Sequence (PTS) as "immensely important" (p. 51). This iconic principle requires that (in Mandarin) "the relative word order between two syntactic units is determined by the temporal order of the states which they represent in the

conceptual world" (Tai, 1985, p.50). Hsieh says that there is a great deal of evidence that many apparently disparate word order rules are governed by this principle, and so there is little need for so-called abstract morphology in Chinese. To illustrate his point Hsieh discusses spatial relations, which involve a two-step process in Chinese, but only a one-step process in English. While English *at*, *on*, and *in* are respectively one, two, and three dimensional prepositions, the Chinese word *zai*^{4} (在) shows a general spatial location, which then adds a whole-part (or container-possessor) relation to indicate an exact position. In this example, the top is a region possessed by the box in a whole-part relationship.

[3.48] 書在箱子的上頭。

shu^{1} zai^{4} xiang^{1}zi de shang^{4}tou^{2}.

book LOC box POSS top.

The book is on top of the box.

The motivation for the use of PTS in such locative constructions is the experience of locating a whole and then the relevant part. Hsieh illustrates this with a long Mandarin locational construction:

[3.49] 書在房子裏的桌子的抽屜的裏頭。

shu^{1} zai^{4} fang^{2}zi li^{3} de zhuo^{1}zi de chou^{1}ti^{4} de li^{3}tou^{2}.

book LOC house inside POSS table POSS drawer POSS inside.

The book is inside the drawer of the table in the house.

This ordering and the use of possessive morphemes conform to the whole-part conception of PTS: we have to see one part of the location before we are able to go to another. Also, according to the Chinese conceptualisation of this locative, a movement metaphor operates, in which the speaker must go to the object in order to describe it in this whole-part fashion. The different metaphors employed by different languages are for Hsieh proof of linguistic relativity; languages "create realities...unique to and interpretable only in terms of these ...languages" (p. 57). He is in agreement with Langacker (1987) that

meaning is very much specific to a given language because of the cultural information upon which language is dependent.

After briefly discussing Langacker's notions of landmark and trajector, Hsieh attempts to integrate these ideas with Tai's PTS, by examining the common phenomenon in Chinese of linking several verbs together in forms such as *zou³jin⁴lai²* (走進來, *walk-enter-come*) and *zou³chu¹qu⁴* (走出去, *walk-exit-go*). He believes that the single act described by the three morphemes *zou³jin⁴lai²* is conceived of as three sequential events in an imaginary-time domain. Chinese speakers extend the real-time notion of PTS to the imaginary realm and deal with complex events by ranking them in accordance with their salience. Using some of Langacker's (1987) tools, Hsieh says that *zou³* (走, *to walk*) is the simplest because it requires a trajector but no landmark. *Jin⁴* (進, *to enter*) requires a landmark and a trajector, the latter being ultimately swallowed up by the landmark. *Lai²* (來, *to come*) requires trajector, landmark, and information that the trajector is moving toward the speaker. Thus *zou³jin⁴lai²* shows an ordering (in imaginary time) from simplest to most detailed in which three simultaneous events are represented by three successive happenings in the mind of the speaker.

Another example of temporal sequencing is seen in two verb combinations such as *shuai¹po⁴* (摔破, *smash-break*) and *chi¹bao³* (吃飽, *eat-be full*), where one verb is the cause of another. For Hsieh, this is because in real life cause precedes effect; although there is some time overlap between the action and the resultant they are presumably separated in the speaker's imaginary time.

A slightly different application of the same general approach is seen in Hsueh's (1989) brief examination of the ba-construction. Right at the beginning of his discussion Hsueh claims that without consideration of semantics any examination of syntax would be "artificial games" (p. 97), and that the ba-construction has certain semantic peculiarities which should form the basis of any syntactic investigation. He suggests that the morpheme *ba³* marks the relationship between several different linguistic forms which

share no common property. Having hinted that the ba-construction (but not other uses of *ba*^{3}) constitutes a radial category, Hsueh gives his own analysis.

The basic form of the ba-construction is A *ba*^{3} B + C. Syntactically, the ba-construction relates C and B directly, with only an indirect role for A. The main idea is that "B turns out to be what C describes in connection to A" (p. 95), rather than that A disposes of B in some way. Hsueh argues that previous emphasis on the relationship between A and B (subject and preposed object) was restrictive, failing for cases of retained objects such as the following

[3.50] 他把黑板(上)寫滿了字。

ta^{1} **ba**^{3} hei^{1}ban^{3} (shang^{4}) xie^{3}man^{3} le zi^{4}.

he ba blackboard (upon) write-full PERF characters.

He covered the blackboard with writing.

[3.51] 他把那個橘子剝皮了。

ta^{1} **ba**^{3} nei^{4} ge^{4} ju^{2}zi bo^{1}pi^{2} le.

he ba that CLF orange peel-skin PERF.

He peeled that orange.

The nature of component C is important here. Hsueh utilises the PTS to show that for many verbal elements the second verb rather than the first acts as the main verb. Thus for verb-complements such as *da*^{3}*po*^{4} (打破, *hit-broken*), *sha*^{1}*si*^{3} (殺死, *kill-dead*), *qiang*^{3}*zou*^{3} (搶走, *grab-away*), *na*^{2}*lai*^{2} (拿來, *carry-here*), *song*^{4}*qu*^{4} (送去, *deliver-there*), in which the basic form is action-resultant, the action verb is secondary. Hsueh's view is that in *ba*^{3} *men*^{2} *tui*^{1}*kai*^{1} (把門推開, *push open the door*), the action verb is secondary because it tells how the resultant state was achieved; the door was put into a state of being open by first having been pushed.

From here Hsueh moves on to look at the role of the agent A. In his example below [3.52] the centre of the VP is actually *guang*^{1} (光) and not *ti*^{4} (剃), which he characterises as a modifier to show how the result was achieved

[3.52] 他把頭髮剃光了。

ta^{1} **ba^{3}** tou^{2}fa^{4} ti^{4}guang^{1} le.

he ba head-hair shave-bright PERF.

He had all his hair shaved off.

The point is that the result of the interaction of the subject with his hair was that he was bald. His hair was literally *bright* (光, *guang^{1}*) meaning *all gone*, a final state which had been achieved through a process of shaving, expressed by the verb *ti^{4}* (剃). Because the resultative complement C describes B's condition, Hsueh says that there is no close connection with the subject A; the only important issue is whether the action verb explains how the particular status of B came about.

Hsueh also adds that the status of B described by C does not have to involve a physical change of state:

[3.53] 她把你看了一眼。

ta^{1} **ba^{3}** ni^{3} kan^{4} le yi^{1} yan^{3}.

she ba you look PERF one eye.

She cast a glance at you.

In this example the state of the object NP was that it had been looked at or glanced at. This status was the result of the subject's interaction with it, even though glancing at something will effect no physical change. Consistent with Langacker's (1987) view of mental actions as chainings from more prototypical physical actions, Hsueh states that although *ni^{3}* (你) is not affected physically, a mental process is happening. Linguistically speaking, "what really counts is what a speaker thinks" (p 106).

Hsueh provides some very useful input to the ba-construction debate, especially with regard to certain of the criteria discussed by other researchers. Although his comments are valuable, he does not achieve a definite conclusion because he does not look at the meaning of *ba^{3}*.

Another very valuable contribution to what may be termed cognitive Chinese

linguistics is that of Tai (1989). In his attempt to place Chinese grammar in a cognitive-functional framework, he begins by stating that the main purpose of language is to facilitate the exchange of ideas, and that syntax has the task of "symbolising reality" (p. 188). Furthermore, because our perceptions of time and space are fundamentally based on our experience of interacting with the world around us, culture, conceptualisation and social background are important in examining language.

He agrees with Langacker (1987) that grammatical structure is derived from the conventional imagery which we use to conceptualise external realities. The semantic systems associated with different cultures have given rise to different grammars. As an example of this, Tai refers to Hsieh's (1978) discussion of the perfective particle *le* with regard to bounded events. Hsieh says that for a simple sentence such as: *che¹zi lai² le* (車子來了, *vehicle come PERF*) three meanings are possible: *The bus came*, *The bus has come*, and *The bus is coming*. For most grammars of Chinese, which mark aspect but not tense, the first two meanings are acceptable but the last is problematic.

To solve this difficulty Tai introduces a concept of completion which is extended to include "having the situation under control" (Hsieh, 1978) and the conceptualisation of imminence. Because control here is a mental state, it is not constrained by real time and so *le* (了) can be used in sentences such as:

[3.54] 他快五十歲了。

ta¹ kuai⁴ wu³shi² sui⁴ le.

he quick fifty years PERF.

He is approaching fifty.

This same approach also produces results in the area of agency and transitivity. Tai suggests that in Chinese agency is not necessarily a characteristic of a transitive action verb; an affected object can also behave as the subject of a transitive verb:

[3.55] 信寫了。

xin4 xie3 le.

letter write PERF.

The letter is written.

In [3.55] the topic of the sentence, the letter, is moved into initial position. Also, because it is clear that a letter cannot itself write, and no other NP is present, there is no chance of incorrectly arriving at the idea that the letter was writing something. In addition, as Tai (1989) has pointed out, Chinese focuses on the result of the action: what is important in this sentence is that a letter has ended up in a state of "writtenness".

[3.56] 衣服洗了。

yi1fu2 xi3 le.

clothes wash PERF.

The clothes are washed.

Exactly the same situation exists in [3.56] as in the previous example. The clothes are the focus of the utterance and are themselves incapable of carrying out the action referred to by the verb. Example [3.56] draws attention to the final washed state of the clothes. From these examples Tai draws the very important conclusion that English needs to know who did what, while Chinese prefers to look at what happened. In Langacker's (1987) terms, English looks down along the action chain from the agent, while Chinese looks upward from the patient.

The tendency for Chinese to emphasise resultant states is also important in looking at the ba-construction. Tai says that the construction is fundamentally a kind of causative, which often operates through a whole-part schema, as in the now famous retained object orange-peeling sentence:

[3.57] 我把橘子剝了皮。

wo^{3} ba^{3} ju^{2}zi bo^{1} le pi^{2}.

I ba orange peel PERF skin.

I peeled the orange.

Tai claims that ba-construction sentences such as that above clearly exemplify the causative nature of the ba-construction, because a result is presented. He is sympathetic to the disposal ideas of Wang Li (1947), as well as Hsueh's (1989) explanation. Tai approves of the use of semantics and functionalism, but feels that more work is required to properly investigate the meaning of *ba^{3}*. He says that his paper is only the beginning of a process which must further explore and develop language-specific principles inherent in the Chinese perception of space and time.

These three papers form the beginning of a cognitive linguistic framework for Chinese. Although only part of one of them is actually devoted to the ba-construction, all three provide very useful insights. Hsueh's (1989) implication that the ba-construction designates a radial category of meanings or schemas meshes with Tai's (1989) comments on boundedness and the nature of agents. The former also stresses that Chinese looks at the ultimate result of an action, regardless of whether that action is physical or mental. Tai considers the ba-construction to be a causative, and is in broad agreement with Wang Li's (1947) disposal idea. Unfortunately, no one examines the meaning of *ba^{3}* and there is no consideration of classifiers or other uses of the word, although it should be reiterated that *ba^{3}* was not the focus of these studies. All are united in the view that Chinese should be understood in terms of schemas based on Chinese conceptualisations of the world. These scholars have proposed a new agenda for the linguistic analysis of Chinese; this thesis will attempt to extend and develop these ideas as they relate to *ba^{3}* and the ba-construction.

This review has shown the steady development of the theory of the ba-construction over around four decades. The structuralist approach to the ba-construction

never sought to give reasons for the form and function of the construction, but did produce useful breakdowns of the verbal elements used after the ba-object. In their attempt to examine exhaustively the structure of individual languages, these linguists documented the nature of the verbal elements which follow *ba*[3] in disposal usages. They also found that ba-sentences most commonly describe a physical action happening to a definite object. From these rather mechanical accounts of the ba-construction can be derived much data which finds application in this thesis. Similarly, even though attempts by the generativists to derive a ba-transformation and mark verbs in the lexicon as [+ba] or [-ba] were unwieldy and fraught with problems, the process of investigation focused attention on the need to consider different types of ba-sentence and verbal elements independently. This showed that the disposal use of *ba*[3] is more complex than can be summarised by a simple transformation; what is needed is an understanding of the relationships between the verb and noun phrases in the sentence. The later transitivist, case grammar and functionalist approaches made very valuable contributions about the nature of agents and verbs used in the ba-construction. Functionalist approaches to the ba-construction showed that he subject of a ba-sentence does not have to be a human being, acting volitionally. Also, the requirement for complex verbal elements following *ba*[3] was understood in terms of a conceptual or temporal boundary to an action. The contributions of all these schools of linguistics certainly have all helped to produce a philosophical background from which cognitive linguistics has attempted to apply semantics and the ideas of conceptual models and schemas in studying syntax and extending our understanding of language.

Each of the earlier schools of linguistics has drawn attention to some portion or other of the very complex ba-construction. Unfortunately, none of them has emphasised the meaning of *ba*[3] in the ba-construction, nor integrated its other uses into a radial category. In Chapters Four and Five, I use many of the findings of these papers to show that there is a general holding schema which governs *ba*[3] and the ba-construction.

Chapter Four.

The Holding Schema.

1. The Holding Schema for *Ba*[3].

The material presented so far in this thesis has described several different uses of the Chinese word *ba*[3] (把), and the efforts of a number of linguists to satisfactorily explain its function in the so-called disposal construction. As stated on a number of occasions in the first three chapters, this thesis will attempt to link all of the various functions of *ba*[3] together, and show how a holding schema makes this possible.

To recap, in modern Chinese the morpheme *ba*[3] is used as a verb, a noun, a classifier, and in the problematic ba-construction. Most of the studies examined in the literature review concerned this last use of *ba*[3], and of those which did consider other functions of the word, none attempted to establish any connection between these and disposal.

The meaning of *ba*[3] is *to hold* or *grasp*; it is first and foremost a verb, as was made clear by the diachronic studies. As discussed in Chapter Two, the form of the character for *ba*[3] (把) contains a modified *hand* radical (手) on the left and a phonetic, [bæ], (巴) on the right. It has already been mentioned that of 273 Chinese characters classified under the hand radical in Liu (1978), only six of them cannot be used as verbs. The central meaning of *ba*[3] is *to hold with the hand* or *take hold with the hand*, and from this concept other extensions broaden the scope of its application. For example, when *ba*[3] or *ba*[4] is used as a noun, a nominalised extension of the schema is working. This noun use should be thought of as *something that can be held or taken hold of*, or *something that facilitates holding and taking hold*. The meaning of the noun is closely related to the central idea of

holding. In analogous fashion, when *ba*^{3} is used as a classifier for nouns, bundles and handfuls of things, or verbs, the idea of holding is extended for grouping or categorising. Thus, when *ba*^{3} is used to classify nouns, the general idea of holding is employed in grouping items which *can be held with the hand* or which possess the means for *facilitating holding*; hence *ba*^{3} is used in counting long, thin, rigid items, as well as those with handles. Similarly, *ba*^{3} is used for bundles and handfuls of things, this partitive function probably an extension from its use as a noun classifier. We can talk of a *ba*^{3} of rice or chopsticks because these items *can be held*, made subject to the *action of holding*. Finally, because holding (in the original sense of *ba*^{3}) is fundamentally an action carried out with the hand, *ba*^{3} is used as a verb classifier to count actions associated with movements of the hand such as *wiping* and *pulling*. Other senses of holding, such as *containing* or *embracing*, are expressed using other words such as *bao*^{1} (包), *rong*^{2} (容), and *bao*^{4} (抱).

An apparently rather different function of *ba*^{3} is in the disposal construction (Wang Li, 1947). Here, as will be investigated in Chapter Five, the notion of physical holding central to the *ba*^{3} schema is extended to include control and the ability to influence. The various restrictions on the use of the ba-construction mentioned in Chapter Three exist because the agent of the sentence has to hold (physically or mentally) the object NP before it can be subject to an action which brings about the final state described in the verbal element in sentence final position. These closely linked meanings of *ba*^{3} form a cognitive model with physical holding at the centre; other functions and uses of *ba*^{3} are chained from this as will be described in this chapter.

Although ICMs may be language-specific, there are often analogues in other languages, consideration of which can aid in understanding how they develop, especially when the cross-linguistic data are from familiar languages. In the next section will be presented cross-linguistic evidence for the relatedness of words for *hand*, *hold*, and *control* in several languages; this will argue that the phenomenon of linking and chaining

of meanings is not restricted to Chinese. While the exact nature of ICMs may vary from language to language, the process of extension of categories will be seen to exist universally.

2. Cross-linguistic Evidence for the Holding Schema.

The holding schema seems to be a linguistic/cognitive universal, depending as it does on human activity and the form of our bodies. In many languages there is an etymological connection between words for *hold*, *control*, and *manage*, which often have the same root as the word for *hand*. The following examples come from a search of dictionaries (listed in the appendix) and replies to an enquiry posted to the Linguist List on the Internet. The examples here are from a variety of languages and languages families and it will be seen that the categories are formed slightly differently in each case. What is important is that there is evidence of extension from physical *holding* to *handles* and the power to influence; the details of schemas or ICMs may vary, but the principles of their formation and operation are fundamentally the same.

Derived from *hand* is the English word *handsome*, which originally meant *easy to manage*. From the same root is *handle* as both a verb and a noun. Similar uses are seen in German, which has *handlich* for *manageable*. *Handel* is the word for *business* or *dealings*, and *handeln* means *to act* or *deal with*. Swedish has *hantera* for *to handle* and *handlaegga* (*hand-lay*) is the word for *bureaucratic work*. A different root has the modern reflex *grasp*; cognate with this are *grip* and *grab*. Also related are the words *grape*, *group*, and *crop*. The first presumably can be held as a bunch and the others are sets of items which can metaphorically be collected and handled together.

The Romance languages show a similar extension from *hand* to *hold* and *control*. Latin *manus* is cognate with French *main*, which appears as *manage* in English. The same French root is found in English *maintain*, which is from *main* (*hand*) and *tenir* (*to hold*). Analogous with these are the Italian forms *mano* (*hand*), *manico* (*handle*), and

maneggiare and *manipulare* (*to handle, to manage*). Among the other Indo-European languages Russian has *rukovodit'* for *to lead a team or group, direct; or supervise* and *rukovoditel'* for *manager*. The roots of the verb are *ruka* (*hand*) and *vodit'* (*to lead*).

Examples from other language families include the Dakotan *yuha* (*to have*) which also means *to grasp*. The first morpheme, *yu*, is used as a *by hand* instrumental which often acts as a general causative. Tagalog *to hold* and *handle* (noun) are both *hawakan.* In Finnish the word *kasi* (*hand*) is extended into the verbs *kasitella* (*to handle*) and *kasittaa*, whose meaning is close to *understand/grasp*. Finally, Zulu has a stem *-phatha* which means *hold, handle, control*, or *administer*, and is found in many such words.

It can be seen in the Germanic and Romance languages that holding words have as their basis the word for *hand*. These languages extend their holding schemas from the body part noun (the roots *hand-* or *man-*) to both the physical action of holding and the nouns which facilitate this action. Thus from *hand* come *to handle* and *a handle* in English, while Italian has the verb *manipulare* and noun *manico* (*a handle*) from *mano* (*the hand*). In addition, in Germanic and Romance there are many extensions from physical holding to the mental or abstract action of controlling or influencing; Swedish *handlaegga* (*bureaucratic work*), German *Handel* (*dealings*) are in this sense parallel with French *manager* (*to manage*) and Italian *maneggiare*. Thus both of these Indo-European branches show a holding schema whose central notion is a noun rather than a verb, but whose extensions are similar to the Chinese.

The Finnish words show an analogous extension from noun (*hand*) to verb (physically *hold* with the hand), with a non-physical extension to mentally holding or *understanding*. This process is similar in Zulu, except that the holding/controlling root does not include the word for *hand*. Lastly, the Dakotan *yu* seems to combine *grasping* and *keeping within the grasp* in the sense of *to have*. When the instrumental *by hand* appears in the *yu* categorythat this word covers the meanings of *grasping by means of the hand, restraining by action of the hand*, and *achieving some end by means of the hand.*

These cross-linguistic data fit with Langacker's (1987) idea of action chains, which suggests that verbs such as *hold*, *grab*, and *grasp* are prototypical transitive verbs because they describe transfer of energy in the physical realm, from an animate, volitional agent to a patient. In the action chain model the agent acts as an energy source and the patient is an energy sink. Applying this action chain idea to *hold/grasp* reveals that there are two (indistinct) variants of this verb, one in which contact is made with the patient during the action, and another in which the agent exerts a force to maintain contact with it. This general interpretation of *hold/grasp* is clarified by the following example sentences in English, which all come from the Reader's Digest articles listed in Appendix D.

[4.1] He **grabbed** a coat and threw it on the flames.

[4.2] While Phil **holds** the torch, Rick **grasps** the pan, and I stir the pot.

[4.3] Archie Chinowth **held** a gun to the head of a terrified fifth-grader.

[4.4] When help arrived, a dazed O'Keefe was still **holding** the weapon.

In each of these examples the agent has effective control over the patient, that is to say, he is in a position to influence the patient in some way so as to produce a result. Thus in [4.1] the coat must have been within reach of the hero, who employed it to smother the fire. Phil and Rick [4.2] both explicitly manipulate the torch and the pan to facilitate the cooking process. In the last two examples the power of the individual over a gun is expressed. In [4.3] the gun is at the disposal of the agent, producing fear in the child, because of what he could do; in [4.4] the implication is that O'Keefe had already exercised control over the gun and could easily have done so again at any time.

This very short selection of cross-linguistic evidence shows that a holding schema is present in many languages, and is sometimes also associated with the word for *hand*. These examples shed light on the schema associated with *holding*, and aid the reader in understanding how holding can imply control, especially for those who are not familiar with Chinese. In addition, they also suggest that holding is a universal action and that the schema exists, albeit in different forms, cross-linguistically. Although there is some

variation in the exact form of the holding schema across languages, when the evidence is considered in totality, it confirms the theory that words for *hand* and *to hold* undergo extensions of different types to convey the ideas of *handling*, *handles*, and *controlling*; the phenomenon of extension across grammatical category is well attested. It is thus reasonable to further examine the different uses of *ba*^{3} and see how they fit together in the light of these examples.

3. The Holding Schema and *Ba*^{3} as a Verb and Noun.

3.1 *Ba*^{3} as a Verb

The holding schema discussed earlier in this chapter exists in Chinese, in connection with *ba*^{3} and other lexical items in the modern language such as *zhua*^{1} (抓) and *wo*^{4} (握), both meaning *to hold* or *grasp*. It has already been mentioned that although commonly employed as a main verb up until around 600 years ago, the single morpheme *ba*^{3} is nowadays very seldom used to mean *hold*. Sentence [4.5] provides an example of this function in the Tang Chinese of 800 A.D., while [4.6] shows one of the few similar uses of *ba*^{3} in the modern language. Note that in [4.6] the single morpheme main verb is followed by a durative aspect marker. Sentence [4.7] illustrates the more common situation in modern Chinese, in which *ba*^{3} occurs in a compound with another single character word.

[4.5] 十一把鏡學點粧。

shi^{2}yi^{1} ba^{3} jing^{4} xue^{2} dian^{3} zhuang^{1}.

eleven hold mirror learn spot make-up.

At eleven [years of age] she holds a mirror as she learns to apply make-up.

(Bai^{2} Ju^{1}yi^{4}'s Simplicity's Song)

In [4.5] the girl is holding the mirror and learning to apply make-up. Here there is no extra morpheme attached to *ba*^{3}, which functions as a main verb.

[4.6] 他緊緊地把住我的手。

ta^{1} jin^{3}jin^{3}de ba^{3}zhu^{4} wo^{3} de shou^{3}.

he tight-tight-ADV hold-CON I POSS hand.

He held my hand tightly. (Concise EC CE Dictionary)

In [4.6] *ba^{3}* is also the main verb, but is used with the durative aspect marker *zhu^{4}* (住). There is thus no compounding here of the the sort found in example [4.7].

[4.7] 這次試驗，他很有把握。

zhei^{4} ci^{4} shi^{4}yan^{4}, ta^{1} hen^{3} you^{3} ba^{3}wo^{4}.

this time test, he very have grasp.

He is sure about the outcome of this test. (Xinhua Zidian)

Ba^{3} is today most commonly found in two character compounds such as *ba^{3}wo^{4}* in [4.7].

In the modern language verbal compounds of *ba^{3}* and some other morpheme may refer to physical holding, mental actions, or activities associated with the notion of control. What is significant is that in all of these cases, as in examples [4.5] to [4.7], the underlying schema appears to include the ready availability of the object held and the ability of the holder to influence events as a result.

There are many compounds of *ba^{3}*, as listed in Chapter Two. Although *ba^{3}zhuo^{1}* (把捉) and *ba^{3}wo^{4}* (把握) mean *to* (physically) *seize* and *to hold* or *grasp* respectively, many of the modern uses of *ba^{3}* are metaphorical or non-physical. Examples of such non-physical or abstract implementations of the idea of holding include *ba^{3}chi^{2}* (把持, *to control* or *dominate*), *ba^{3}guan^{1}* (把關, *to guard a post* or *check on quality*), and even *ba^{3}wo^{4}* itself in [4.7]. Note that *ba^{3}wo^{4}* can describe both physical and mental actions. In the modern language then, the holding schema for *ba^{3}* still exists, albeit extended to include non-physical acts, such as controlling, guarding, and having an influence. In fact there is no clear distinction in the holding schema between physical and abstract; just as Chinese uses *hold/grasp* in a metaphorical sense, so does English in examples such as *He grasps new things very quickly* or *I hold that you are guilty of this crime*. As mentioned

above, the holding schema is a cognitive model, whose central meaning is that of physical holding. Just as this model is expanded to include nouns, which can be held or grasped, so the nature of the holding can also be extended to mental actions and control or the power to influence. Thus *grasping an idea* involves mentally taking firm hold of a concept, and *holding someone guilty* suggests that the speaker exercises control, albeit in his mind, over the fate of the individual concerned. In both cases a non-central meaning of holding is found; these constitute a broader operation of the holding schema. The examples from both Chinese and other languages (in the previous section) demonstrate that there is a general holding schema, which is used for physical and non-physical actions. Examples from the pre-modern Chinese period, such as [4.5], suggest that the meaning associated with *ba*^{3} was almost exclusively physical holding, whereas sentences such as [4.7] and the disposal usage show that broadening to the abstract domain has occurred. This process of evolution is a result of a process of grammaticalisation; many researchers have examined this type of change, finding that broadening of the scope of a word and extension from the physical to the abstract domain is very common cross-linguistically (Langacker, 1987; Sweetser, 1987; Bybee, 1988).

3.2 *Ba* as a Noun

Apart from verbal uses, the existence of a number of *handle* nouns such as *ba*^{3} *bing*^{3} (把柄, *handle*) and *cha*^{2} *hu*^{2} *ba*^{4} (茶壶把, *teapot handle*) which use *ba* with either a third or a fourth tone (see Chapter Two) suggests that the *ba*^{3} holding schema has been extended from actions to entities. As mentioned above, the extension here is from the action described by a verb to the physical objects which can be affected by that action; that is, from *hold* to *that which can be held*. This is consistent with the idea of radial categories and category extension (Lakoff, 1987).

The extension of *ba*^{3} as a verb to *ba*^{4} (and *ba*^{3}) as a noun involves a change of tone in the pronunciation of the same character. Chinese does not have derivational

morphology which overtly marks change of grammatical category; in fact the role of a given lexical item in a sentence is usually dependent on context. However, there are a number of characters which can be pronounced with two different tones, depending on which grammatical category the (single character) word is being used in. These will be discussed below. It should be stated at this point that the number of such words is not great, as there are other means by which most lexical items fit into different grammatical categories without change of tone. Many single characters which function as lexical items fit into grammatical categories purely on the basis of context. For example, the character *guan*^{1} (關) can mean *to close* as well as *a connection* or *relationship*, or even *a mountain pass*; the word *dai*^{4} (帶) means *belt*, *ribbon*, or *tape*, and also functions as a verb to mean *bring*, *carry*, *lead* or *raise children*. Also, while many single character lexical items shift grammatical category without employing tone change, others form compounds in order to clarify meaning and function. For example, *biao*^{3} (表) has the meaning of *a surface*, *to show* or *to display*, and forms compounds such as *biao*^{3}*shi*^{4} (表示, *to indicate* or *express*, for example a feeling or welcome) and *biao*^{3}*mian*^{4} (表面, *the surface*, *outside*, or *appearance*), which are verb and noun respectively. While the phenomenon of tone change being employed to show change in grammatical category has been documented for Cantonese (Ramsey, 1987), none of the major works on the Mandarin Chinese language appear to address this issue.

To illustrate the use of tone to signal a change in grammatical category, consider the following examples from Mandarin.

[4.8a] *bei*^{1}, 背 to carry on the back — *bei*^{4}, the human back

[4.8b] *chu*^{3}, 處 to be situated — *chu*^{4}, a place, position

[4.8c] *dan*^{1}, 擔 to carry on a pole — *dan*^{4}, a carrying pole, burden

[4.8d] *ding*^{1}, 釘 a nail — *ding*^{4}, to nail

[4.8e] *jiao*^{1}, 教 to teach — *jiao*^{4}, education, religion

[4.8f] *liang*^{2}, 量 to measure — *liang*^{4}, capacity

[4.8g] *nan²*, 難 difficult　　*nan⁴*, a calamity

[4.8h] *shan¹*, 扇 to fan　　*shan⁴*, a fan

[4.8i] *zhong¹* ,中 middle　　*zhong⁴*, to hit a target

In each case changing tone indicates changing grammatical category, although it is not possible to formulate a rule specifying the tones used for verbs and nouns. These examples show from the nature of the tone change and the direct relation between pairs of words that *ba³* as a verb and *ba⁴* as a noun are by no means unusual. The relationship between such words is often that of action or state and noun associated with that action or state, although at this point no claim can be made by this author about which meaning or use is the original or base one for any of examples [4.8]. For example, in [4.8e] there is a clear connection between the act of teaching (*jiao¹*, 教) and the concept of education or religion (*jiao⁴*, 教); but without extensive investigation of the historical use of the character (教) there is no way of determining which (if any) meaning came first. These words which exhibit tone change suggest that a given schema can operate across tones and across grammatical categories. This evidence is useful as it shows the wide scope of the holding schema, and how it can be extended. The next section will examine how the holding schema operates through the classifier, *ba³*.

4. The Classifier *Ba³* and the Holding Schema.

The use of classifiers in Chinese was summarised in Chapter Two. It was mentioned that modern Chinese uses around 40 noun classifiers (Chao, 1968) and that these are usually associated with one or more semantic fields. This section will build on this knowledge of classifiers, incorporating evidence from other authors, to show that classifiers are generally derived from nouns or verbs, and that the general holding schema for *ba³* is seen in an extended form in the Chinese classifier for things with a handle. Although this section focuses on noun classifiers, because this is the most common form of classifier, it should be borne in mind that Mandarin also has verb classifiers and partitive

classifiers as described in Chapter Two.

Traditionally, grammarians have described the function of classifiers in noun phrases and listed the nouns with which they are used (Chao, 1968; Tiee, 1986), often referring to them as *measures*. In recent years, however, researchers have focused on their taxonomic functions and the older term, classifier, is once again preferred (Croft, 1994). While early structuralists did an excellent job of documenting the nouns used with classifiers, they often neglected the mechanism of classification inherent in a given classifier system.

In a detailed cross-linguistic study of classifiers and classifier systems Croft (1994) attempts to elicit a hierarchy of classification, which is based on semantics. He concludes that in most classifier languages (by which he means languages which use classifiers as a lexical item when counting or pointing, as opposed to languages which have gender systems), the primary distinction is between animate and inanimate. He believes that different classifiers are used with animate nouns; the exact nature of the latter may vary according to the beliefs of the speakers of the language. Some languages use optional polite classifiers with unknown people or people of status (Chinese and Tai), Dyirbal places men and women in separate groups (Dixon, 1968), and Thai uses an honorific classifier for elephants (Delancey, 1986).

After the animacy distinction, however it operates in a given language, comes the important feature of shape. Croft argues that shape categorisations are based on dimensionality (p.153). One-dimensional objects are "stick-like", two-dimensional objects are plate-like, and three-dimensional objects are usually roundish in shape. Closely related to this distinction are those of orientation and rigidity, especially for 1-D objects. Thus objects may be classified according to whether they are normally found vertical or horizontal, and on the basis of stiffness. The final characteristic mentioned by Croft is "nature/function" (p. 152). He stresses that this is secondary to questions of shape and orientation, and may be used to refine categorisations according to the above criteria. As

examples of this kind of categorisation Croft mentions the distinctions edible/non-edible and cooked/non-cooked.

Adams and Conklin (1973) also discuss classification by function, commenting that this is not as common as we might expect. Although Nung and Kachan are languages which have a noun class for tools, Adams and Conklin conclude that shape is more important than function *per se*. Although function alone can produce noun classes and classifiers, noun classes are very often formed by an interaction of function and shape, as in Burmese, where there is a classifier for things which are handled, and Japanese, which has a classifier for things which have handles. I believe that just such an interaction of function and shape has acted to produce the *ba*^{3} classifier in Mandarin, by extending the verbal function of the holding schema.

The development of classifiers from verbs and nouns is very common cross-linguistically, and may in fact be the principal source of classifiers. Allan (1977) suggests that in most languages classifiers are derived from nouns, but that in a large number of cases, classifiers also evolve from verbs. There are examples in many languages of words being used as both nouns and classifiers, depending upon the position in the sentence. Hopper (1986) states that the Malay nouns *orang* (*person*) and *ekor* (*tail*) are also used as classifiers, in the phrases *tiga orang budak-budak* (*three boys*) and *dua ekor tikus-tikus* (*two rats*). A similar example comes from Mithun (1986), who states that in the Cayuga language of Ontario, *-tr-* is the verb root for *to drag*. This is also the stem for *car*, and for the classifier for vehicles. The same situation exists in Chinese, where *tou*^{2} (頭, a classifier for domesticated animals) means *head*, *zhi*^{1} (枝, *twig*) is also a classifier for pens and flowers with stems, *zhang*^{1} (張, *to extend*) classifies flat thin things such as pieces of paper, and of course *ba*^{3} means *to hold, a handle*, and acts as a classifier.

This section has introduced on a very superficial level some of the concepts of classifiers, their hierarchical structure and their relationships with nouns and verbs. The same principles operate for the Chinese word *ba*^{3}. In the Chinese classifier system shape

is very important, and the language has several classifiers for 1-D objects. *Zhi*^{1} (枝, noun use means *twig*) and *gen*^{1} (根, noun use means *root*) are used for long, thin items, the latter more particularly for vertical orientations. *Tiao*^{2} (條, ancient noun use meant *a strip of bamboo*) is used for long, thin, wiggly things. Finally, *ba*^{3} is used for longish items which can be grasped or which have a handle. The last two examples show clearly the interaction of shape with nature or function criteria; the holding schema for *ba*^{3} is used to refine the categorisation of 1-D objects.

The extension of nouns or verbs to classifiers appears to rely on what He (1993) calls the intrinsically metaphoric nature of classifiers. He states that classifiers make use of all or part of the shape of the object they refer to, and gives the following examples:

[4.9a] 一把骨頭。

yi^{1} ba^{3} gu^{3}tou^{2}.

one CLF bone. CLF = *handle*

a bone.

[4.9b] 一葉小舟。

yi^{1} ye^{4} xiao^{3} zhou^{1}.

one CLF small boat. CLF = *leaf*

a little boat.

[4.9c] 一枝春色。

yi^{1} zhi^{1} chun^{1}se^{4}

one CLF branch spring-colour. CLF = *twig*

a hint of Spring.

[4.9d] 一尾魚。

yi^{1} wei^{3} yu^{2}.

one CLF fish. CLF = *tail*

a fish.

In example [4.9a] the bone is something like a stick or handle, of about the same

dimensions and stiffness. The use of *leaf* [4.9b] to classify a small boat is based on the appearance of the boat from above, like a leaf floating on the water. A metonymic use is found in [4.9c], where a blossom of Spring flowers represents the entire season, and in [4.9d], where the tail represents the whole fish.

With this information at our disposal, we are now in a position to look at the classifier uses of *ba³* which were found in a review of several Chinese dictionaries (listed in Appendix B) and grammars.

The nouns for which *ba³* is regularly used as a classifier are *knife*, *teapot*, *chair*, *fork*, *spoon*, *fan*, *umbrella*, *spatula*, *axe*, *scissors*, *hoe*. Tiee (1986) adds that the meaning of *ba³* is *object with a handle*. These nouns can be classified by *ba³* because they are all items which can be held or physically include some means of facilitating holding. As discussed above, this extension of the holding schema relies on nominalisation: from the action of holding to enitities to which such an action can be applied.

Ba³ also is used as a partitive classifier to indicate a handful of things (count and non-count) such as rice, soil, or sand, peanuts, bunches of chopsticks or flowers, fried noodles. Lu (1984) summarises this use by commenting that these objects can be grasped by the hand or tied with string. Again, the partitive use of *ba³* is a very similar extension to the noun classifier use just summarised. The holding schema is applied not only to single entities which can be held or have a means for holding, but also to groups of items which together can be held in the hand. The nouns mentioned here are not classified by *ba³* when they occur singly; thus we normally speak of *yi¹ li⁴ mi³* (一粒米, *a grain of rice*) or *yi¹ zhi¹ kuai⁴zi* (一枝筷子, *a chopstick*), where *li⁴* and *zhi¹* mean *small grain* and *twig* or *stick* respectively. The nouns *rice* and *chopstick* are classified with *ba³* in instances where they are present in sufficient amounts to constitute a handful, enough to be *held* in the hand.

As a verb classifier, *ba³* is used for "movements of the hand" (Han Ying cidian), in sentences such as:

[4.10] 他拉他一把。

ta^{1} la^{1} ta^{1} yi^{1} ba^{3}.

he pull him one CLF.

He gave him a pull.

In [4.10] the feeling is of a pull which lasts for a short time, an instance of pulling. Thus *ba^{3}* is used to classify this brief movement of the hand. Chao (1968) interprets *ba^{3}* in this verb classifier usage as *grip* (p. 617) and comments that it is frequently used in the same manner as [4.10] for the verbs *nie^{1}* (捏, *to pinch*), *qia^{1}* (掐, *to pinch* or *nip*), *zhua^{1}* (抓, *to grasp*), *la^{1}* (拉, *to pull*), and *bang^{1}* (幫, *to help*). Lu (1984) gives similar examples, such as:

[4.11] 快幫我一把。

kuai^{4} bang^{1} wo^{3} yi^{1} ba^{3}

quick help I one CLF.

Give me a hand, quick.

Example [4.11] is very similar to [4.10], except that the brevity of the action is further clarified by the addition of *quick*. He further adds that the *ba^{3}* can classify actions which have some connection with the hand, such as:

[4.12] 擦一把臉。

ca^{1} yi^{1} ba^{3} lian^{3}.

wipe one CLF face.

Give the face a wipe.

In this example, [4.12], ba3 classified the action and not the face; again the action of wiping is connected with the hand.

Lu's last two examples below involve *ba^{3}* as a verb classifier, although it must be said that the usage here could be considered close to a partitive.

[4.13a]一把鼻涕。

yi1 ba3 bi2 ti4.

one CLF nose mucus.

a wipe of snot.

[4.13b]一把眼泪。

yi1 ba3 yan3 lei4.

one CLF eye tear.

a wipe of tears.

Clearly, *ba3* here is not categorising *snot* or *tears*; it is classifying predominantly the action of the hand, with something of the sense of a handful.

5. Summary of *Ba3* in the Holding Schema.

The holding schema links together verbal, nominal, and different types of classifier uses of the word *ba3*. From a general, central verbal meaning of *hold* come *to hold*, *handle*, *something which has a handle*, *like a handle*, and classes of nouns that can be held. Also there are actions which *grasp* or *hold*, as well as those connected with movements of the hand. These related meanings constitute a cognitive model, which has at its centre the notion of holding with the hand. As the examples in this chapter have shown, the cognitive model has expanded to include entities that can be held, either because their shape naturally makes this possible, or because they are fitted with a handle. Thus the cognitive model of holding, the holding schema, has the noun function of *ba3* (and *ba4*) as a major extension away from the central meaning. From the examples of noun classifier and partitive classifier uses of *ba3* it would appear that these classifier uses are related to noun uses and probably represent a further departure away from the central verbal meaning. This broadening from specific nouns (which can be held with the hand) to classes of nouns (that can be held) is consistent with a process of grammaticalisation (Traugott, 1982). Another extension, probably from the central verbal meaning, is *ba3* as

a verb classifier. As shown in this chapter, the verbs which can be classified with *ba³* refer to actions carried out with the hand. Given that holding with the hand is a very good exemplar of an action associated with the hand, it appears that *ba³* can be used to classify actions such as *pulling*, *wiping*, and even *helping* because they have a connection with the hand. Clearly, *helping* may not necessarily be directly related to the hand and this itself must be considered a chaining by analogy from those other actions whose connection with the hand is more explicit. Such is to be expected and adds support to the notion of chaining advanced by Lakoff (1987). The English phrases *a helping hand* and *give someone a hand*, which can be used for actions in no way related to the hand, show that similar processes exist in our own language. The holding schema is thus a network of functions of one word with several extensions from a central meaning. *Ba³* has one more function, in the disposal construction, which will be addressed in the next chapter. It too is related to the holding schema.

The uses of *ba³* so far described show a strong connection to the central *hold* meaning; in the next section the extension of *hold* to *control* or *manage* (as summarised with cross-linguistic examples in section two) will be described. This more metaphorical use of *ba³* is, I believe, the basis of the ba-construction, to which the greater part of Chapter Three was devoted. The various criteria mentioned by other researchers, along with difficulties encountered by them in their insightful studies of the ba-construction, can be explained by considering the disposal use (Wang Li, 1947) as an extension from the central holding schema. To investigate the various criteria for the ba-construction (human agent, definite NP after *ba³*, physical change affecting the patient of *ba³*, and volitionality), it was decided to look at examples of ba-sentences from actual texts and analyse them to see how well the criteria were met. The description of this investigation and the taxonomy used, as well as conclusions about the nature of prototypical ba-sentences, are presented in the next chapter.

Chapter Five.

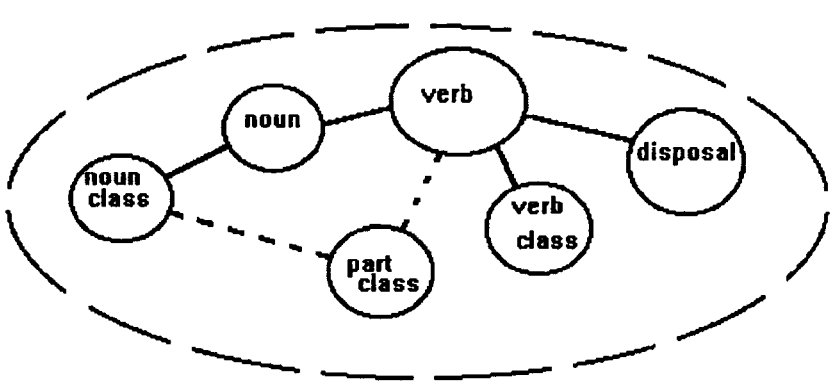
Disposal and the Holding Schema.

1. The Ba-construction as an Extension of the Holding Schema.

In the last chapter, the *ba*[3] holding schema was introduced, along with extensions of the idea of physical holding or manipulation to the notions of controlling or influencing. It was proposed that the *ba*[3] holding schema is fundamentally an action or verbal concept, with extensions to nominal and classifier uses. In this chapter will be described a small scale study of ba-sentences using written examples from modern Chinese. The study looks at the nature of these ba-sentences in an attempt to provide data to establish a prototypical ba-sentence and demonstrate how the holding schema can explain the ba-construction.

The general shape of the holding schema is shown in Figure 1. Just as the holding schema is extended from verbal to noun and classifier use, so it also underlies the ba-construction; disposal is an action, just as the fundamental meaning of *ba*[3] is.

Figure 1. Diagrammatic Representation of the *Ba*[3] Holding Schema.



I believe that the generally accepted structural criteria for the disposal construction

(discussed below in Section Three) arise directly from the central verbal meaning of *ba*^{3}, and the extension of the action part of the holding schema from the physical to the control domain. The centrality of the verbal meaning of *ba*^{3} is shown in Figure 1, along with the extension of verbal ***holding*** to disposal and other uses of the word as discussed in Chapter Four.

In many languages, as the examples in Chapter Four have shown, words for ***hand*** and the action of ***holding*** are often used to convey the idea of control or influence. Chinese is no exception; *ba*^{3} is used in a construction which explicitly requires that the causer (I use this neutral term to avoid any of the implications associated with the term *agent*) in the sentence be capable of influencing or affecting the object of the word *ba*^{3}. In addition, although many have criticised Wang Li's (1947) disposal notion, I believe that his understanding was fundamentally correct. Weaknesses in Wang Li's approach can be found when a very strict interpretation of his definition is taken, because he seems to adopt a rather narrow view of disposal. It may be that Wang Li's concept of disposal is somewhat simplified or idealised, or perhaps only describes the most common characteristics of ba-sentences. With the hindsight afforded by fifty years' progress in linguistics, it appears likely that what Wang Li was presenting was his view of the prototypical ba-sentence, without consideration of non-prototypical cases, or "departures from the canon" (Langacker, 1987). The inclusion of natural or fuzzy categories into the cognitive linguistics theory of language allows us to suggest that problem ba-sentences, such as those which do not have a human agent, or which do not physically affect the object of *ba*^{3}, are less representative of the category of ba-sentences and thus poorer examples.

As well as producing the structural criteria mentioned above (which have as their basis the conclusions of Wang Li's study discussed in Chapter Two), researchers have also looked at the different types of verbal elements which follow the word *ba*^{3} and its object.

In the following example, the object of *ba*^{3} is the noun phrase *zhe*^{4}*zhi*^{1} *si*^{3}*qu*^{4} *de mao*^{1}, which means *this dead cat*.

[5.1]我...把這隻死去的貓掛在窗上。

wo^{3}...**ba**^{3} zhe^{4}zhi^{1} si^{3}qu^{4} de mao^{1} gua^{4} zai^{4} chuang^{1}shang^{4}.

I...ba this CLF die-go NOM cat hang LOC window on.

I hung up this dead cat in the window.

The verbal element (underlined) comprises the words *gua*^{4} *zai*^{4} *chuang*^{1}*shang*^{4}, meaning *hang in the window*. It acts in the ba-sentence to specify that the dead cat was dealt with by the causer in such a way that it was hung up in the window. It describes the state of the object (the cat) as a result of the action of the causer.

The verbal elements which follow *ba*^{3} in disposal sentences have been categorised according to several taxonomies, which have been produced by a number of researchers (Wang Li, 1947; Lu, 1948; Chao, 1968; Thompson, 1973). For the purposes of categorising the ba-sentences from modern literature used in this study it was decided to combine the different taxonomies to give the following list of verbal element types: resultative, retained object, patient/beneficiary, locational, directional, and numeral and measure. Thus, the ba-sentences found in the study were categorised according to the six types just listed. These may be compared with those of Wang Li (1947) in Chapter Two, as well as with the results of the different studies discussed in Chapter Three. An explanation and examples of each of the ba-criteria and the types of verbal element will be given later in this chapter.

2. The Data Used in This Study.

A brief investigation was carried out, in which a group of ba-sentences were taken from texts in the modern Chinese language. This would facilitate an examination of real sentences, as opposed to linguists' creations, to determine how important the above-mentioned structural criteria are. It was decided to use two categories of texts to find ba-

sentences: extracts from books and short stories by modern Chinese authors, and articles from modern Chinese newspapers and magazines from mainland China and Taiwan. The titles of the articles and books and newspapers can be found in Appendix C. Ninety ba-sentences were found in the texts, whose total length was around 40000 Chinese characters. A native speaker of Chinese who has received training in linguistics was asked to read the articles and note every occurrence of a ba-sentence. These were then written in romanised form with approximate English translations by the researcher and the native Chinese speaker. Next, the sentences were classified by verbal element according to the types above, and each one was examined to see to what extent it fulfilled the structural criteria.

In the next section the ba-criteria and verbal elements will be explained, using examples from the present study. The reader will also note that some sentences were rather difficult to categorise; this fact is evidence of the inherently fuzzy nature of language and suggests that problems may follow on from too rigid a framework of classification.

3. The Ba-criteria and Examples.

Every analysis of the ba-construction makes some reference to the idea that the grammatical subject of the ba-sentence affects the object of *ba*^{3} in some definite way, and many studies refer to Wang Li's (1947) definition of disposal. From the research work which has been carried out over the last few decades, it is possible to draw out several structural criteria which have to be met in order for a ba-sentence to be acceptable. These requirements, which I shall call the ba-criteria, are as follows:

1) The agent must be animate (Wang Li, 1947).

2) The object of the ba-sentence must be a definite NP (Lu, 1948; Wang Huan, 1963; Hopper & Thompson, 1980).

3) The agent must act volitionally (Hopper & Thompson, 1980; Wang Li, 1947).

4) The action must involve a physical change of state (Wang Li, 1947).

5) The action must be complete or total (Wang Li, 1947; Hopper & Thompson, 1980).

Although several researchers are listed here, and these requirements are explicitly employed in their work, this set of conditions is accepted to a greater or lesser extent by almost every paper written about the ba-construction.

For the purposes of this study, these criteria were formed into a checklist which was used for each example ba-sentence. Preliminary examination of the corpus of sentences showed that the ba-criteria would need to be interpreted more broadly than they were in the five requirements above. For example, a refinement of the animate agent stipulation was made because the textual examples contained several subcategories under the general idea of agent or causer. Therefore, the implementation of the criteria was adjusted in the light of the data obtained. The ba-criteria as employed in this study are outlined below, with examples taken from the sentences gathered in this study.

1) Causer.

The original requirement was for the causer to be animate, but the corpus of sentences examined suggested refinement to include the four types described below.

i) Person (e.g. *we*, *Ma Erli*, *Director Wu*);

[5.2]馬爾立把煙向技術員手裏一塞。

ma^{3}er^{3}li^{4} **ba^{3}** yan^{1} xiang^{4} ji^{4}shu^{4} yuan^{2} shou^{3}li^{3} yi^{4}sai^{1}.

Ma er li ba smoke towards technical person hand-in one stuff.

Ma Erli put the cigarettes into the hand of the technician.

ii) Human entity or organisation (e.g. *the leadership*, *everyone*, or *America*);

[5.3]美國...把台灣作爲一個獨立的政治實體對待。

mei^{3}guo^{2}...**ba^{3}** tai^{2}wan^{1} zuo^{4}wei^{2} yi^{2}ge du^{2}li^{4} de zheng^{4}zhi^{4} shi^{2}ti^{3} dui^{4}dai^{4}.

America ba Taiwan do-as one CLF independent NOM political entity treat.

America treats Taiwan as if it were an independent political entity.

It could be argued that the category *human entity* is fundamentally the same as that of *person*, as the former is merely a collection of persons at a given level of organisation. In these examples, the most complex human entity was *America*; although it could not be claimed that each individual constituent person in the group agreed with the action of the country, the entity mentioned does i) possess a (corporate) will, and ii) allow itself to be represented by a (metonymic) administration. When assessing how many sentences contained an animate agent, personal agents and human entity agents were counted together.

iii) Abstract entity (e.g. *this comment*, *this matter*);

[5.4]一句話把大家都說得笑起來了。

yi¹ju⁴hua⁴ **ba³** da⁴jia¹ dou¹ shuo¹ de xiao⁴ qi³lai le.

one sentence speech ba everyone also speak ADV laugh begin PERF.

One comment made everyone start laughing.

iv) Object (e.g. *a bean*, *a light-bulb*);

[5.5]四隻兩百支光的燈泡把馬路都照得灼亮。

si⁴zhi¹ liang³bai³ zhi¹guang¹ de deng¹pao⁴ **ba³** ma³lu⁴ dou¹ zhao⁴ de zhuo²liang⁴.

four CLF two hundred watt NOM light bulb ba road also shine ADV brilliant bright.

Four 200 watt light bulbs made the road brilliantly bright.

In addition, because Chinese often leaves the subject of a sentence unstated, there were implied causers which required the addition of subjects such as *he* or *they* to the English translation. These implied causers all fit into the four types mentioned here, however, and were categorised with them. For example, [5.6] contains an animate agent, who is not actually specified explicitly in the Chinese text. There is no third person pronoun written in the Chinese, and one is supplied in the English translation, in square brackets. The *he* in the English sentence is thus an implied causer.

[5.6]畫完了把瓦碴子一扔。

hua^{4} wan^{2} le **ba^{3}** wa^{3}cha^{2}zi yi^{4} reng^{1}.

draw-finish-PERF ba tile one throw.

After finishing drawing, [he] threw the piece of tile.

2) The object of the ba-sentence.

As for the causer criterion, a brief review of the example sentences broadened the nature of the object into definite, indefinite, and generic NPs. The latter included phrases such as *everyone* and *tangled messes of things* as in [5.7]:

[5.7]他的頭腦...善于把糾纏著的東西理出個頭緒。

ta^{1} de tou^{2}nao^{3}...shan^{4} yu^{2} **ba^{3}** jiu^{1}chan^{2} zhe de dong^{1}xi li^{3}chu^{1} ge tou^{2}xu^{4}.

he POSS brain good towards ba entangled CON NOM thing sort-out CLF threads.

His mind is good at sorting out tangled messes of things.

Definiteness was assessed in one of two ways. If a noun phrase included a demonstrative such as *this* or *that*, then definiteness was marked morphologically. In other cases, it was necessary to look at the discourse and see if a noun phrase had been referred to in the previous few sentences. If it had, then this was judged definite. It follows that nouns which had not been mentioned before in the discuss would be classed as indefinite (Chao, 1968; Li & Thompson, 1981). Also, although Chinese lacks articles, it is common for a new participant to be marked in the darkness by the numeral *yi^{1}* (*one*) and a noun classifier; thus *yi^{1} ge^{4} ren^{2}* would usually be translated as *a person* .

3) Volitional action.

For this criterion, a simple distinction was made between those sentences in which the action was volitional [5.8] and those in which it was not [5.9].

[5.8]大家...把她放在一邊等待醒過來。

da4jia1... **ba3** ta1 fang4 zai4 yi4bian1 deng3dai4 xing3 guo4lai.

everyone ba she place LOC one side wait wake cross-come.

Everyone... put her on one side to wait [for him] to come around.

[5.9]有些地方...把賓館休得像廟堂似的。

you3xie1 di4fang...**ba3** bin1guan3 xiu1 de xiang4 miao4tang2 shi4 de.

have CLF place ba hotel decorate ADV like temple as-if NOM.

There were a few places which made the hotel decoration seem like that of a temple.

4) The action as a change of state.

Similar to the situation above, a binary distinction was made between actions which were physical [5.10] and actions which were mental or in the thought realm [5.11] (Langacker, 1987).

[5.10] 馬爾立...好像要把站長逼到石灰池裏去。

ma3er3li4...hao3xiang4 yao4 **ba3** zhan4zhang3 bi1dao4 shi2hui1chi2 li3 qu4.

ma er li seem want ba station-master force to lime-pit in go.

It looked as if Ma Erli wanted to force the stationmaster into the lime-pit.

[5.11]我們一直希望把這種關係發展下去。

wo3men2 yi4zhi2 xi1wang4 **ba3** zhe4zhong3 guan1xi fa1zhan3 xia4qu4.

we one-straight hope ba this kind relationship develop down go.

We have been hoping for a long time to further develop this relationship.

It is important to realise at this point that animacy of agent and volitionality are related. That is, a volitional action is presumably always undertaken by an animate agent, although an animate agent could also perform an involuntary action, such as breaking a vase or accidentally standing on a cat's tail.

5) Completeness of action.

This was the most difficult criterion to evaluate. It was decided that a completed action is i) one which is described using a sentence which ends in a perfective aspect marker *le*^{4} (了), or otherwise signals morphologically that it is bounded in time and finished; or ii) an action described using a verb phrase which inherently contains the notion of completeness, according to the semantics of the verb phrase. This interpretation was employed because it combines the findings of the structuralists mentioned in the review of literature with Li and Thompson's (1981) idea of conceptual boundary. The latter is more difficult to apply to the real sentences in the corpus gathered for this study; however, the requirement for control or at least the capability of influencing in order that an action has some kind of end point does exist in the data as shown in [5.13].

The difference between actions which are grammatically marked as complete, and those with a conceptual boundary is shown by the following examples. Example [5.12] carries verb morphology to mark a completed action, while in [5.13] the verb *song*^{4}*hui*^{2} provides a conceptual boundary for the action.

[5.12]朱舟把自己的意見說出來了。

zhu^{1}zhou^1 **ba**^{3} zi^{4}ji^3 de yi^{4}jian^4 shuo^1 chu^{1}lai^2 le.

zhu zhou ba self POSS idea speak out-come PERF.

Zhu Zhou spoke out his own ideas.

[5.13]治保主任...把她送回家裏。

zhi^{4}bao^3 zhu^{3}ren^4...**ba**^{3} ta^1 song^4 hui^2 jia^1 li^3.

security director ba she send return home in.

The security director took her home.

Note that [5.12] is counted as showing completeness because the required perfective aspect marking (了) is present. In [5.13] the verbs *song*^{4} (送, *to send*), and *hui*^{2} (回, *to return*) together create the notion of completeness; *sending* contains an inherent idea of envisaged completeness, as does *returning*. In real life, of course, the desired aim of

the sender may not have been accomplished and the object or person sent may not have actually arrived at the destination, but at the time of sending the intention was surely that the process would run to completion.

4. The Ba-construction Verbal Elements.

The taxonomy for ba-construction verbal elements adapted from Wang Li (1947) and Lu (1984) is described here, with examples from the data gathered in this study.

1) Resultative.

The resultative ba-sentence describes an action which caused some kind of change to the object of *ba*[3]. Although the change could be physical or mental, it is more akin to a change of state than of location or direction. This category includes Wang Li's "aspect" type, in which the perfective marker is attached to the verb following *ba*[3]. This category may be considered the catch-all category, as some of the others (e.g. locational and directional) can be thought of as special cases of the resultative; locational verbal elements describe the resulting location of the object after the action, and directionals specify how an object was affected so as to move in a certain direction. Examples [5.14] and [5.15] both show resultative ba-sentences.

[5.14]把王廣香打得昏迷不醒達兩三個小時。

ba[3] wang[2]guang[3]xiang[1] da[3] de hun[1]mi[2] bu[4]xing[3] da[2] liang[3] san[1] ge xiao[3]shi[2].

ba wang guang xiang hit EXT confused not-wake reach two three CLF hour.

As a result of the beating, Wang Guangxiang lost consciousness for two to three hours.

[5.15]時間一長造反派就把他給忘了。

shi[2]jian[1] yi[4]chang[2] zao[4]fan[3]pai[4] jiu[4] **ba**[3] ta[1] gei[3] wang[4] le.

time one long create-resist-group then ba he make forget PERF.

Over time the rebellious group forgot about him.

Example [5.14] describes how persons unknown interacted with Wang Guangxiang with the result that he was beaten and left unconscious for some length of time. Similarly, in [5.15] a mental action occurred, the result of which was the forgetting of the person by the rebellious group.

2) Retained Object.

This category was included to allow separate counting of sentences of the type highlighted by Thompson (1973), in which *ba*^{3} is followed by an object NP1 and verbal element, and then a further object NP2. Usually this kind of sentence involves a change or effect in which NP1 is affected by the verbal element to become NP2 or related to it in some way. The following examples will clarify the point. In [5.16] the construction *ba*^{3}*...dang*^{1}*zuo*^{4} is similar to the English *take...for* or *look upon...as*. Thus, by the action of the causer (*everyone*), NP1 (*the boy*) was looked upon as or mentally changed into NP2 (*a lively and able younger brother*). A similar situation exists in [5.17], where the speaker literally *spoke-transformed* (*shuo*^{1}*cheng*^{2}) the wedlock into the character *fascination*.

[5.16]大家都把他當作一個活潑能幹的小兄弟。

da^{4}jia^{1} dou^{1} **ba**^{3} ta^{1} dang^{1}zuo^{4} yi^{2}ge huo^{2}po neng^{2}gan^{4} de xiao^{3} xiong^{1}di^{4}.

everyone also ba he look-upon make one CLF lively can-do NOM small brother.

Everyone thought of him as a lively and able younger brother.

[5.17]她把兩人的結合說成一個「痴」字。

ta^{1} **ba**^{3} liang^{3}ren^{2} de jie^{2}he^{2} shuo^{1}cheng^{2} yi^{2}ge chi^{1} zi^{4}.

she ba two person POSS join-together speak-become one CLF fascinate word.

She used the word "fascination" to describe the wedlock of the two people.

3) Patient/beneficiary.

In these types of ba-sentence there are also two objects, NP1 and NP2. Here, however, NP1 (the patient) is influenced according to the action described in the verb in such a way that NP2 is the beneficiary or goal:

[5.18]王廣香...把肩上的書包交給治保主任。

wang²guang³xiang¹...**ba³** jian¹shang⁴ de shu¹bao¹ jiao¹gei³ zhi⁴bao³ zhu³ren⁴.

wang guang xiang ba shoulder-upon POSS book-bag transfer-give security director.

Wang Guangxiang gave the bag on his shoulder to the security director.

In sentence [5.18] the bag is the patient, NP1. This object was affected by Wang Guangxiang's action such that it was given to the security director, whose role in the sentence is that of beneficiary, because the he was the recipient of the bag.

4) Numeral and Measure.

This final type is related to the above two in that there are two NPs. In these sentences, however, the second NP consists of a numeral (in most cases unity) and noun or verb classifier. These verbal elements express repetition of events which are themselves inherently quick, the numeral and measure serving to show this (Chao, 1968).

[5.19]馬爾立把大腿一拍。

ma³er³li⁴ **ba³** da⁴tui³ yi⁴pai¹.

ma er li ba big-leg one slap.

Ma Erli slapped [his] thigh.

Example [5.19] could be roughly translated as *Ma Erli gave his thigh a slap*, in which *a slap* corresponds to the Chinese numeral and classifier.

5) Locational.

Locational verbal elements show that the object of *ba³* was affected in such a way as to be placed in a specific location.

[5.20]我會把自己鎖在房裏。

wo^{3} hui^{4} **ba^{3}** zi^{4}ji^{3} suo^{3} zai^{4} fang^{2} li^{3}.

I will ba self lock LOC room-in.

I will lock myself in the room.

[5.21]我...把健康擺在人生的第一位。

wo^{3}...**ba^{3}** jian^{4}kang^{1} bai^{3} zai^{4} ren^{2}sheng^{1} de di^{4}yi^{1} wei^{4}.

I ba health place LOC person-life POSS first position.

I put health first in a person's life.

Example [5.20] summarises how the causer interacted with the ba-object; the result was the placing of someone in a specific location. In this reflexive example, at the end of the action the person was located in the room. Analogously, in [5.21] the causer mentally interacts with the ba-object, ***health***, which results in its being located in the first position in the person's life. This second example, [5.21], is interesting in that it describes an action that occurs in the thought realm. Clearly then, ba-sentences are not restricted to discussing physical changes.

6) Directional.

This category is similar to that above, except that the verbal element describes an action which is directional, rather than locational. In [5.22] the object is given a directional change by the causer; Qian Wengui's wife dealt with her (own) face with the result that it was moved in a certain direction.

[5.22]錢文貴的老婆把臉更湊進了過來。

qian^{2}wen^{2}gui^{4} de lao^{3}po^{2} **ba^{3}** lian^{3} geng^{4} cou^{4}jin^{4} le guo^{4}lai^{2}.

qian wen gui POSS wife ba face even move close PERF cross-come.

Qian Wengui's wife brought [her] face even closer.

5. Summary of the Ba-sentences used in this study.

In this section will be summarised the breakdown of the ba-sentences into the categories described above. The figures and percentages will describe to what extent the ba-criteria were met, and present the nature of the ba-construction verbal elements.

A total of 90 ba-constructions was found in the almost 40000 characters of Chinese text examined. The ba-criteria mentioned in previous studies were found to be important indicators of grammaticality. In the following tables will be presented the results of the examination of the ba-sentences used in this study. In Tables 1 to 5 the sub-categories which show agreement with the requirements of the five ba-criteria are marked with asterisks.

Table 1 presents the results for the causer category. Under the causer criterion, 68 sentences (76%) contained a personal agent, and 10 (11%) involved a human organisation, giving a human agent total of 78 examples, which is 87 percent. The subjects of six sentences (7%) were abstract entities; a further six ba-sentences (7%) had an inanimate object as the subject.

Table 1

Numbers and Types of Causers in the Ba-sentences.

Type of Causer	Number Found	Percentage Found
Person*	68	76
Human Organisation*	10	11
Abstract Entity	6	7
Inanimate Object	6	7
Total	90	100

Thus, the criterion requiring an animate agent was well met by the sentences in this study; 87% of them contained a human agent.

The results for the different types of object NP in the sentences are shown in Table 2. For the definite NP requirement, 80 sentences (89%) included a definite NP, while no sentences used an indefinite object. A small number of sentences, ten, involved a generic NP object. These figures show that the requirement for a definite NP (p.105) was fulfilled, as 89% of the sentences did contain a definite NP.

Table 2

Numbers and Types of Object NPs in the Ba-sentences.

Type of Object	Number Found	Percentage Found
Definite Noun Phrase*	80	89
Generic Noun Phrase	10	11
Indefinite Noun Phrase	0	0
Total	90	100

The fulfillment of the volitionality criteria (p.105) is detailed in Table 3.

Table 3

Volitionality of Action in the Ba-sentences.

Nature of Action	Number Found	Percentage Found
Volitional*	79	88
Non-volitional	11	12
Total	90	100

Seventy-nine ba-sentences (88%) described a volitional action, while eleven (12%) did not. As for the first two criteria, the requirement for the action to be volitional was met in almost 9 out of every 10 sentences.

In Table 4 are presented the results for the types of actions described by the ba-sentences. There were 62 ba-sentences (69%) describing physical actions, and 28 concerning purely mental or thought activities (31%).

Table 4

Nature of the Action in the Ba-sentences.

Nature of Action	Number Found	Percentage Found
Physical*	62	69
Mental	28	31
Total	90	100

Clearly, the specification that the actions described in ba-sentences must be physical and cause a change of state in the object NP (p.105) was not closely adhered to by the examples in this study; only two-thirds of the sentences contained a physical action.

Table 5 summarises how many of the sentences referred to a completed action.

Table 5

Completeness of Action in the Ba-sentences.

Nature of Action	Number Found	Percentage Found
Complete*	72	80
Incomplete	18	20
Total	90	100

Regarding this last criterion, completeness, 72 sentences (80%) involved finished actions, and 18 actions (20%) were incomplete. These results show that most of the sentences did concern a completed action and that this criterion was met in four-fifths of the examples.

Table 6 (next page) lists the types of verbal element occurring in the ba-sentences and specifies how many of each type were found.

Table 6

Number and Types of Verbal Elements in the Ba-sentences.

Type of Verbal Element	Number Found	Percentage Found
Resultative	35	39
Directional	25	28
Locational	15	17
Retained Object	6	7
Patient/Beneficiary	5	6
Numeral/Measure	4	4
Total	90	100

Thirty-five (39%) of the verbal elements were resultative, and 25 (28%) directional. The third most commonly found type was locational, with 15 occurrences (17%). The other types of *ba*[3] verbal element were seen much less frequently. There were 6 cases (7%) of retained objects, 5 patient/beneficiary sentences (6%), and 4 examples of numeral and measure (4%). The majority of ba-sentences detailed the result on the object NP of the action referred to; more than one third of the verbal elements described the resultant state, while another 45% showed the directional or locational change brought about by the action. The prominence of these three types of verbal elements confirms the idea that ba-sentences fundamentally state what happened to the object NP, as proposed by Thompson (1973).

This examination of ba-sentences found in modern written Chinese shows that, in terms of frequency of occurrence in this data sample, the criteria most commonly met for use of the ba-construction are those shown in Table 7 (next page).

Table 7

Fulfillment of the Ba-criteria by Sentences in this Study.

Criterion	Numerical Fulfillment	Percentage Fulfillment
Definite NP	80	89
Volitional Action	79	88
Human Agent	78	87
Completed Action	72	80
Physical Action	62	69

The frequencies for animacy of causer, definiteness of object NP, and volitionality of action are almost identical, the figures being 87, 89, and 88 percent respectively. Behind these three almost equally fulfilled criteria comes the requirement for a completed action (79%), and then the need for the action to be physical (62%), as opposed to mental. This bunching of the first three criteria in the ba-sentence examples will be commented on below.

When the examples were examined to determine how well they met all the ba-criteria, the results presented in Table 8 were found. Table 8 shows that of 90 sentences, 46 of them (51%) actually satisfied all five criteria and thus could be described as prototypical for the purposes of this study. That is, half of the ba-sentences fit the description of the ba-construction given by Wang Li, which was later added to by Lu (1948) and several of the researchers mentioned in Chapter Three. Of the remaining 44 sentences, 19 met four of the (five) ba-criteria, and 17 met three. Seven sentences fulfilled only two of the ba-criteria, while no sentences satisfied only one of them, and only one sentence of all 90 failed to meet any at all.

Table 8

Degree of Fulfillment of the Ba-criteria by the Sentences.

Number of Criteria met	Number of Sentences	Percentage of Sentences
5	46	51
4	19	21
3	17	19
2	7	8
1	0	0
0	1	1
Total	90	100

Examples of sentences which meet different numbers of ba-criteria follow.

[5.23]我...把他扯翻在地上了。

wo^{3}...**ba^{3}** ta^{1} che^{3}fan^{1} zai^{4} di^{4}shang^{4} le.

I...ba he pull-turnover LOC ground upon PERF.

I...pulled him over onto the ground.

Example [5.23] meets all five of the ba-criteria; its causer is a human being acting volitionally. The object of the sentence, *him*, is a definite NP. The action is physical and complete.

[5.24]馬爾立把煙向技術員手裏一塞。

ma^{3}er^{3}li^{4} **ba^{3}** yan^{1} xiang^{4} ji^{4}shu^{4}yuan^{2} shou^{3}li^{3} yi^{4}sai^{1}.

ma er li ba smoke towards technical-person hand-in one stuff.

Ma Erli put the cigarettes into the hand of the technician.

Sentence [5.24] is another case where all five criteria were met. The human agent takes the cigarettes and willingly stuffs them into the hand of the recipient; the action is complete and physical.

[5.25]錢文貴...就想靠姪女把他拉了過來。

qian^{2}wen^{2}gui^{4}...jiu^{4} xiang^{3} kao^{4} zhi^{2}nü^{3} **ba^{3}** ta^{1} la^{1} le guo^{4}lai^{2}.

qian wengui...then wish rely niece ba he pull PERF over come.

Qian Wengui...just relied on [his] niece to win him over.

In [5.25] a human agent is acting volitionally, as Qian's niece is the causer of the action in the ba-clause. This action is complete, but not in the physical realm because winning someone is a matter of the mind or will. Thus, in this case, only 4 criteria are met.

[5.26]我們一直希望把這種關係發展下去。

wo^{3}men yi^{4}zhi^{2} xi^{1}wang^{4} **ba^{3}** zhe^{4}zhong^{3} guan^{1}xi fa^{1}zhan^{3} xia^{4}qu^{4}.

we one-straight hope ba this kind relationship develop down go.

We have been hoping for a long time to further develop this relationship.

Example [5.26] meets only three of the criteria because it involves a mental or thought action and is not complete. It does however, contain a human agent acting volitionally on a definite NP, the *relationship*.

The last example here, [5.27], is the single sentence which did not meet any of the ba-criteria:

[5.27]一句話把大家都說得笑起來了。

yi^{1}ju^{4}hua^{4} **ba^{3}** da^{4}jia^{1} dou^{1} shuo^{1} de xiao^{4} qi^{3}lai le.

one sentence talk ba everyone all speak EXT laugh rise come PERF.

This comment made everyone start laughing.

In [5.27] the causer is an abstract noun, which is not capable of volitional action. Also, the ba-object, everyone, is a generic noun phrase rather than a definite one. Furthermore, this action occurred in the thought realm, and the physical manifestation of laughter is a result of this. Finally, because this comment acted to cause people to laugh, there is no temporal bounding. An interesting addition can be made to the discussion of this sentence if context is taken into account. Although *everyone* is normally considered a generic NP, the discourse could actually specify and thus restrict the scope of this word. For example,

if *everyone* is taken to refer to *everyone who was there at the time, involved in the joke*, then it is much more definite than it initially appears to be. Natural categories are even encountered during the analysis of sentences; definite NPs and generic NPs are points on a continuum and may even move on this continuum as affected by the discourse.

For sentences in which only four of the five criteria were met, the causer was animate in 84% of them; all of them involved a volitional action, and 89% of them employed a definite object NP. By contrast, in the same four-criterion group, only 74% of the sentences described a completed action and merely 53% contained a physical action. A similar situation exists for sentences which met only three criteria: 76% of these had an animate causer and an equal percentage referred to a definite object NP. A slightly lower percentage (71%) concerned a volitional action. Again, the completed action and physical action criteria were not so well met with percentages of 47% and 29% respectively. Of the ba-sentences here which met only two criteria, the fulfillment of the animate agent, definite object NP, and volitional action criteria was in each case 43%. Here only 14% involved a physical action, and a surprisingly high 57% described completed actions.

For the verbal elements, ba-sentences which showed a resultative state or a directional or locational effect of an action together constituted more than three-quarters of all the sentences examined, as shown in Table 6.

These brief results have major implications for this analysis of the Chinese word *ba*^{3}, and in particular for the claim that the ba-construction represents an extension of the holding schema. The importance of each of the ba-criteria in the light of this examination of data and the existence of a prototypical ba-construction suggested by these results will be addressed in the next section.

6. The Prototypical Ba-construction and the Ba-criteria.

As mentioned above, half of the ba-sentences found in this study conformed to the 5 criteria compiled from Wang Li and other researchers. In addition, for those sentences

which fulfilled four or three of the criteria, there appears to be a bunching effect in which the requirements for an animate agent, a definite object NP, and volitional action were met to roughly the same extent. These three seem to play a vital role in making a ba-sentence grammatical, with the completeness and physical action criteria less important. These results generally suggest that the criteria for the use of the ba-construction are valid, particularly the bunched three already mentioned. In this section the relationship between the ba-criteria and the meaning of the verb *ba*^{3} will be shown, in terms of the holding schema.

The three most important criteria for the ba-construction, at least in terms of the number of sentences that satisfied them, were the requirement for an animate causer, a definite object NP, and a volitional action. The fact that 87 percent of the ba-sentences examined contained such an agent can be traced to the meaning of *ba*^{3}. The principal meaning of *ba*^{3} in the holding schema is *to hold*, as mentioned in many studies of the ba-construction. Prototypically, holding is an action performed by humans; in addition the expansion of *ba*^{3} to form instrumentals in the Tang dynasty (Norman, p.131) further supports this because humans are the prototypical users of instruments in the broadest sense of the word.

The second commonly fulfilled requirement was that the object of *ba*^{3} be a definite NP. For the sentences in this study, there were no cases where an indefinite NP was referred to; even in cases where a definite NP was not found, the reference was made to a generic NP, which would be known to the hearer or reader as a result of the discourse in which it was found. Thus, in Teng's (1975) terms, every NP was "actual", existing at least in the mind of the speaker before the utterance. This actuality is connected with the verbal, action meaning of *ba*^{3}. In a metaphorical sense, the object of the ba-sentence is physically or mentally held by the causer; as was shown above, the action of holding is extended to include the power to affect or influence in many languages. It is important for ba-sentences to refer to a definite NP because only when the referent is within the power of

the speaker can it be disposed of or influenced: we cannot affect an object if we have no power over it. The definiteness requirement is thus seen to be not only a result of the hold meaning of *ba*^{3}, but more specifically a consequence of the verbal, action nature of the central notion of the holding schema because this word describes a transitive action.

Related to both of these is the issue of volitionality. Seventy-nine out of 90 ba-sentences described volitional actions. As stated above, a human or animate causer can carry out an action volitionally or non-volitionally, but an inanimate object or abstract idea has no such power of will. Thus in most cases examined here, a causer was able to influence or affect an object because it (the causer, most often a human or human organisation) was able to make a decision to do so. The volitional, physical holding meaning of *ba*^{3} is thus extended to the control domain, while preserving the decisiveness of the action as an act of will by a causer. Of all the sentences, only three with a human or human organisation causer involved a non-volitional action. There is thus a strong relationship between animacy of causer and volitionality.

The bunching of three of the criteria together for three groups (those meeting three, four, and five respectively of the five ba-criteria) of ba-sentences suggests that these three criteria may be the most significant in producing a prototype ba-sentence. Although the other criteria (physical action and completeness of action) are certainly valid, the consistency with which the first three criteria are met is reminiscent of Rosch and Mervis (1975) findings regarding family resemblance and prototypicality. In their study they found a correlation between the ranks of items in a category according to subjects' crude assessment of goodness of example and a more analytical assessment of family resemblance according to weighted shared attributes. In other words, Rosch and Mervis showed that people's concept of the prototypicality of a category member was clearly related to the same subjects' idea of the features which defined the category. They found that the greater the sharing of attributes between members, the more likely these members would be identified as prototypical. This bunching of attributes or elements of a member

of a category is also investigated by Coleman and Kay (1981) in their study of the English word *lie*, as in *to tell lies*. They hypothesised that the prototypical lie contains three features, and investigated the relative importance of these features, concluding that they were not all of equal importance. Also, the more features a given lie contained, the more likely the subjects were to rate it as prototypical.

A combination of the findings of Rosch and Mervis (1975) and Coleman and Kay (1981) appears to exist with regard to the ba-criteria. Certainly three of them are fulfilled more than the other two, and would thus seem to be important in establishing the prototype. However, as Coleman and Kay found, if one or more of these central features are missing, an item may still be a member of the category, but may not be considered a central member or good example. The three central features examined in this study (the bunched criteria discussed above) have all been shown to have a strong connection with the concept of *holding* as an action (*ba*^{3} as a verb), and thus if we accept that the disposal use of *ba*^{3} comes from an extension of *to hold*, it is not surprising that these features specify good examples of disposal.

That the disposal use of *ba*^{3} is an extension of the central, verbal meaning of the holding schema is further demonstrated by the fact that 72 out 90 (80%) of the ba-sentences examined concerned a completed action. The metaphorical extension of the physical action of holding to controlling or influencing surely manifests itself most prototypically through completed actions. That is, if it is within our power to influence or affect an object, it is reasonable to expect that ability to be exploited to completion. Thus while the best examples of completed actions are verb phrases with the appropriate morphological marking, verbs which by their meaning express a finished act are also acceptable; they include conceptual boundaries of the sort referred to by Li and Thompson (1981). Discussing the inherent semantic completeness of verbs, Teng (1975) gives the examples of *to hit* and *to kill*. Hitting is a action with no definite end point or conceptual boundary; if no morphology is added to a verb phrase containing hit, then there is no

indication that the action will end. Killing on the other hand contains a definite end point, when the object dies. In most cases then, the appearance of the verb kill brings with the idea of completeness, unless other parts of the sentence complicate matters, in sentences such as *he killed everyone between Stillwater and Guthrie*. Here the adverbial extends the length and scope of the action beyond that which we would normally consider, because the action of killing is extended and made repetitive. Also, the adverbial may affect the scope of *everyone* in the same way as was discussed above. If *everyone* referred to members of a club or group known to both speaker and hearer, then in context the word would not in fact refer to every living human being between the two towns, but would instead be restricted to the members of the society previously identified. In both these kinds of verb phrases (those with semantic and those with morphological completeness), completeness is expressed, whether explicitly marked on or included in the verb itself, even though context may affect the internal nature of the completed process or the scope of its application.

It may be helpful to consider events morphologically marked as complete and actions which involve a conceptual boundary as regions on a continuum of boundedness. Towards one end of the continuum lie completed events described by verb phrases with the appropriate perfective morphology, such as *zou³chu¹qu⁴le⁴* (走出去了, *walked out*). At the other end can be found verbs which are either not bounded by morphology or do not have an inherent notion of completeness; examples could be *ai⁴* (愛, *to love*), or *kao³lü⁴* (考慮, *to consider*), which are essentially open-ended, with no aspectual restriction of any sort. In between these two ends, and more towards the complete events side of the continuum, are verb phrases which describe an event with a conceptual boundary (usually a temporal or completeness boundary), but do this semantically, rather than with explicit verb morphology. These are definitely much more bounded than the open-ended verbs at the unbounded end of the continuum, but do not have morphologically marked aspectual restrictions. These verb phrases exhibit a fuzzy completeness (often in time) which is not

as definite or clear as that seen in those with perfective morphology; the completeness observed here is less than prototypical and can be considered a non-ideal perfect example of the category of completeness. This fuzzy completeness is the same as Li and Thompson's (1981) conceptual boundedness, occurring in verbs such as *song⁴hui²* (送回, *send-return*), which was found in the corpus of ba-sentences in this study.

What both types of completed act verb phrases have in common is the idea that the action is not open-ended, and is somehow restricted in time. In one case, perfective aspect markers show that the action has finished, while verbs with a conceptual boundary provide some notion of completeness semantically. It could be argued that conceptual bounding arises from the transfer into the semantic or control domain of the time domain restrictions imposed on a verb by perfective morphology. In both types of completeness of action, the causer acts to influence or manage a situation in a certain bounded way, and therefore the establishment of conceptual boundaries may be a chaining from the central notion of completion of an action.

Another example of chaining and extension is the last criterion mentioned by previous researchers, that the action described by a ba-sentence should be physical and involve a change of state of the object. This requirement that the action in the ba-sentence bring about a change of state is linked to the central verbal meaning of *ba³*, because the prototypical means of effecting change is by an action. In the data used in this study, 62 examples out of 90 (69%) concerned a physical change, while 28 cases (31%) described a mental or thought process. Thus, almost one third of all the ba-sentences found here represent a departure from the specified criterion. That this requirement should exhibit the greatest number of violations is not surprising; the physical action which is the basis of the holding schema is extended to an influencing or managing role in the ba-construction, regardless of whether the action in the verbal element is physical or mental. This extension constitutes a precedent for non-physical or metaphoric use, and thus it is to be expected that the ba-sentence in its totality could describe a mental as well as physical

action. In the same way as for the other ba-criteria, while the requirements specified by other researchers have been shown to be directly related to the everyday uses of ba-sentences, there is room for departure from the prototype.

Similar phenomena are shown by the verbal elements which occur after the ba-object. As presented above, the most popular verbal element was the resultative, followed by the directional and locational respectively. This lends support to Thompson's (1973) interpretation of the ba-construction as answering the question *What happened to X?* where X is the object of *ba*[3]. That is, the ba-construction focuses attention on how an object was dealt with by the causer, which sounds very much like Wang Li's analysis. The implication of the holding schema here is that the ba-construction describes what happened to the object while it was under the influence of the causer; ba-sentences summarise the fate of the object while it was physically or metaphorically held by the causer. Casting Thompson's (1973) test question in terms of this cognitive linguistic approach, we can say that the ba-construction tells us what happened to X as a result of the causer holding it.

This understanding fits with the ba-criteria and the verbal elements. Thompson rightly looked at the ba-construction as relating what happened to X; this analysis agrees with and adds to her viewpoint by claiming that a full understanding of her test is rooted in the meaning of *ba*[3]. After all, if the object is affected by being under the influence of a causer, is not the prototypical causer or influencer a human being (or group of them) with the ability to hold or handle? Likewise, if something is held and thus influenced (even metaphorically), is that not most probably a volitional action? Holding (as a verb) also implies the potential to act in totality and bring a task to completion. With this understanding, even an accidental action such as the breaking of a vase, although non-volitional, can occur only if the vase was capable of being influenced by the causer; we cannot break a vase in Seattle by accidentally knocking into it when walking on the street in Brisbane any more than we can ponder some issue of which we have never heard.

Concerning definiteness of the NP, surely the best example of something which can be influenced or affected is something held by us, directly in our power, or which is known to us and thus not new information. Physical and mental actions have already been discussed above; metaphor lies at the very heart of the use of the holding schema for Wang Li's "disposal" construction.

7. The Ba-criteria and Prototypicality.

It appears from the analysis of the ba-sentences found in this study that Wang Li's (1947) description of the ba-construction and the conditions that have to be met for a ba-sentence to be acceptable spring from the meaning of the word *ba*^{3}. Furthermore, the meaning of *ba*^{3}, as illustrated by the holding schema, is responsible for the characteristics of the prototypical ba-construction. However, it was seen in this study that half of all the ba-sentences found did not satisfy all five of the ba-criteria; that is to say, half of the sentences examined did not strictly adhere to Wang Li's original definition.

As mentioned earlier in this thesis, almost every researcher who has looked into the ba-construction has found reason to criticise Wang Li's description. In addition, for each theory advanced to account for the characteristics of the ba-construction there are several studies which produce examples to refute that explanation. It is a fact that every explanation of the ba-construction which relies on a classical model of categorisation (in which a category has clearly defined boundaries and members which exhibit equality of representativeness of that category) shows this apparent weakness.

Lakoff (1987) and Langacker (1987) have both shown how membership in a category is graded, with some members being better examples of that category than others. Categories have central members, to which other members are added by analogy and extension. The evidence from this present study shows that even when a category member (in this case the category is the set of acceptable ba-sentences in Mandarin Chinese) does not meet every supposed requirement for membership, it can still be a member.

Chaining from central members of the category of acceptable ba-sentences has produced the variety of ba-sentences seen in this study. For example, while this investigation has found the prototypical causer to be a human agent, acting volitionally, there were several instances of abstract ideas and inanimate objects acting as the prime cause of a given situation. Thus, when four 200 watt light bulbs lit up a road, they were just as much a causer as Ma Erli in his slapping of his thigh, although not as good an example of the notion of causer.

In the same way, because Chinese tends to focus attention on the final state of events in an action (Tai, 1985), non-volitional as well as volitional actions can be found in acceptable ba-sentences, as the degree of volitionality is not as important as the fact that the action occurred. The prototypical verb describes a voluntary human action; while volitional acts fit the ba-construction prototype better than involuntary ones, the latter are included as acceptable ba-sentences because they represent extensions of the category of actions. Also, ba-sentences can describe completed actions using appropriate verb morphology, as well as apparently less clear cases of actions with "conceptual boundaries" (Li & Thompson, 1981).

Likewise, generic noun phrases, such as *jiu^{1}chan^{2} zhe de dong^{1}xi* (*tangled messes of things*), and *da^{4}jia^{1}* (*everyone*) can be considered chainings from the definite object NP, which is the principal type. Indefinite NPs with no known referent are still ruled out from acceptable ba-constructions by the requirements of the holding schema, but generic NPs refer to concepts which are inherently definite, but less so than the more commonly encountered definite NPs.

Finally, it is no accident that the criterion apparently most tolerant of variation was the requirement for the ba-sentence to describe an action with physical results. Holding is readily extended to the mental or thought domain, and Langacker (1987) has eloquently discussed mental actions and the thought realm. Discussing "grammaticization" (p. 325) with respect to the use of *go* to mark future time, Langacker comments that extension or

even conversion from the physical to the abstract domain is a common feature of this process. Clearly then, as *ba*[3] has been extended and changed to show the influence or effect of a causer on an object NP, this has allowed the description of mental acts as well as physical ones.

This section has explained how ba-sentences which apparently violate the conditions for acceptability are in fact extensions of the fundamental concept of the ba-construction. This discussion has relied on the model of categorisation advanced by Lakoff (1987) and Langacker (1987), as well as using evidence of the toleration of category membership gradation found in examples of ba-sentences from modern written Chinese. In the next section the idea of prototypicality will be employed to explain variation in the *ba*[3] verbal elements.

8. *Ba*[3] Verbal Elements and Prototypicality.

As mentioned above, the most common verbal element found in this study was the resultative, followed by the directional and locational respectively. That the prototypical verbal element should specify the general result of an action is a direct result of the holding schema and Thompson's (1973) test question: *What happened to X?* These two ideas taken together help us restate the ba-construction as specifying what happened to X (the object NP) as a result of the causer's holding and influencing it. In addition, Tai (1985) has proposed a principle of temporal sequence, PTS, one of the claims of which is that Chinese places emphasis on the ultimate result of an action, rather than the participants and their interactions. Although the details of this theory are subtle and its applications much broader than the ba-construction, PTS helps us to understand ba-sentences generally, and retained object sentences in particular.

It can thus be seen that directional and locational verbal elements are, and in fact must be, special cases of the resultative. These two types of verbal element describe some kind of vector influence affecting the NP; directional verbal elements emphasise the

directional change brought about by the causer, while locational elements highlight the final spatial location of the object NP as a result of some action or motion. With this understanding of the function of *ba*^{3} verbal elements it is possible to understand the approach of the structuralists. They correctly apprehended that the (prototypical) ba-construction describes a final state of affairs by means of verbal elements in the sentence final position; their mistake was the demotion of *ba*^{3} to the status of a preposition. Although the grammaticalised *ba*^{3} does not appear to have the status of a verb, apparently overshadowed by the verbal elements, it in fact plays a vital role in communicating the fact that the causer acted on or influenced the object NP to bring about the result summarised by those verbal elements.

Exactly the same situation exists with respect to patient/beneficiary verbal elements. These summarise how a causer influenced the object NP such that it was, for example, given, returned, or passed to a third party. The structure of these sentences again highlights the final result of the action, specifying how the beneficiary interacted with the object NP.

Although numeral and measure verbal elements do appear to show a final state, it is clear that this type of verbal element is somewhat different from those mentioned above, as the NP object of *ba*^{3} is followed by a numeral and measure only. Chao (1968) comments that such constructions show tentativeness or an action of very short duration, with the suggestion that these functions are not closely related: a brief action may be complete, whereas a tentative action carries no guarantee of completion. Indeed Chao discusses this tentative function of numeral and measure as a shortened form of the "tentative reduplicative" (p.205); thus the numeral and measure expression *yi*^{1} *kan*^{4} (一看, *one look*) may be reduced from *kan*^{4} *yi kan*^{4} or *kan*^{4} *kan*^{4}. The occurrence of tentativeness together with the idea of completion and the power to influence associated with *ba*^{3} represents something of a contradiction. However, if the numeral and measure verbal element is used to indicate a quick action, this could certainly refer to a complete

action. These verbal elements thus may not be the best examples of the ba-construction, because although they may in some cases contain some notion of conceptual boundary, they may not describe a completed final state.

Another, different departure from the prototype is represented by retained object verbal elements. As mentioned above, these are of the form NP1 V NP2, and typically involve the transformation of NP1 into NP2, wholly or partially. Thompson (1973) examined such constructions and from this work derived her *What happened to X?* test. Retained object ba-sentences exhibit movement away from a prototype, with the answer to Thompson's question becoming more and more figurative. Example [5.16], translated as *Everyone thought of him as a lively and able younger brother* contains a verbal element *ba³...dang¹zuo⁴* which corresponds with the English *thought of...as*. In this sentence the ba-object *him* in its totality is viewed as something different (a younger brother). However, in other sentences, such as [5.28], only a part of the object is affected by the action:

[5.28]張三把橘子剝皮。

zhang¹san¹ ba³ ju²zi bo¹ pi².

zhang-san ba orange peel skin.

Zhang-san peeled the orange.

In this example, found in almost every paper written about the ba-construction, the scope of Thompson's (1973) test question is stretched somewhat. That is to say, to the test question *What happened to X?* the answer is given in terms of what happened to part of X or that X was influenced by the causer such that only part of it was affected. The discrepancy between a question about a whole and an answer related to a part is the normal state of affairs in human language (Langacker, 1987). In his terms, these kinds of grammatical constructions involve "active zones" (p. 191), which highlight part of a whole according to its cognitive salience.

A further departure from the consider-A-as-B model mentioned earlier in this section is a type of retained object sentence in which NP2 was never part of NP1, but becomes a part of it, or at least associated with it, as a result of the influence of the causer. This is illustrated by [5.29], taken from Hashimoto (1971):

[5.29]張三把信封貼上郵票。

zhang^{1}san^{1} ba^{3} xin^{4}feng^{1} tie^{1}shang^{4} you^{2}piao^{4}.

zhang-san ba envelope stick-put stamp.

Zhang-san stuck a stamp on the envelope.

Here the sticking on of a stamp describes the resultant state of the envelope, which requires the NP2 of the verbal element to specify how the envelope was handled or influenced by the causer.

A related type of retained object ba-sentence is one in which NP2 describes a final situation which is not part of NP1. Also, the connection between NP1 and NP2 is much more tenuous than in the previous examples. By thinking of these sentences not as violations of the governing principles of the ba-construction, but as chainings from a central type, examples such as [5.30] and [5.31] can be considered acceptable.

[5.30]他把紙門踢了一個洞。

ta^{1} ba^{3} zhi^{3}men^{2} ti^{1} le yi^{1}ge^{4} dong^{4}.

he ba paper door kick-PERF one CLF hole.

He kicked a hole in the paper door.

[5.31]請你把這事寫一個報告。

qing^{3} ni^{3} ba^{3} zhe^{4} shi^{4} xie^{3} yi^{1} ge^{4} bao^{4}gao^{4}.

please you ba this matter write one CLF report.

Please write a report on this matter.

In [5.30] the causer acts such that the door is literally *kicked a hole*. Clearly, this sentence cannot be made to directly say that the door was kicked into a state of "hole-ness"; what happened here is an extension of the resultative nature of *ba^{3}* so that the result of the

kicking was a hole. A further departure from the prototype is [5.31], in which the report has no direct relationship with the matter in question. However, the causer here mentally interacts with the matter so as to produce a report about it. Again, in both these examples, it is important to remember that Chinese emphasises the final state more than intermediate steps.

This chapter has proposed that the holding schema associated with the Chinese word *ba*^{3} introduced in the previous chapter is also applicable to the ba-construction. The metaphorical nature of control or influence as an extension from holding was developed, particularly as relevant to the criteria determined by previous researchers as necessary for an acceptable ba-construction sentence. These criteria and the verbal elements following *ba*^{3} and its object were also investigated by using sentences from two types of modern Chinese literature. It was found that the requirements for ba-sentences identified by other studies were appropriate and derived directly from the meaning of the word *ba*^{3}. In addition, the data gathered as part of this study allowed the specification of a prototypical ba-sentence; following this, what had been hitherto categorised as problematic sentences could be understood as examples of non-prototypical ba-sentences. The notion of gradation of category membership was shown not only to be inherently realistic, but also of great value in approaching the problems of natural language. In the next chapter will be summarised the status of the ba-construction vis-a-vis other uses of *ba*^{3}. It is claimed that all the meanings and uses of *ba*^{3} are related by the holding schema. Implications for our understanding of language and language teaching will also be described.

Chapter Six.

Conclusion and Implications.

1. Conclusion

This thesis has focused on the different but related meanings and functions of the Chinese word *ba*^{3}. Although it draws on the work of many researchers and uses the findings of many different schools of linguistics, this study takes as its guiding principle cognitive linguistics (Langacker, 1987; Lakoff, 1987).

As discussed in Chapter One, the cognitive linguistics view of language makes several broad claims about the nature of linguistic systems and their relation to the other cognitive abilities we have. It is believed that language is structured according to the same principles as, and is affected by, our non-linguistic world knowledge and experience. From this premise follows on the beliefs firstly, that there is no specialised language faculty, and secondly, that our linguistic knowledge cannot be separated into the neat compartments of syntax, semantics, and phonology emphasised by many traditional linguists.

In this model of language, because syntax and semantics cannot be treated separately, the investigation of syntax requires and benefits from careful attention to the meaning of grammatical functors of various sorts. In addition, our apprehension of our environment is represented by natural categories with graded membership and fuzzy boundaries, as the pioneering work of Rosch (1973, 1977) has shown. If language is in fact part of the greater cognitive apparatus, then it must exhibit the same graded categories and general prototype effects, as Lakoff (1987) has so convincingly argued. These two conclusions from cognitive linguistics have been employed in this thesis, in the study of *ba*^{3}.

The idea that language is influenced by cognition and human experience led to the development of the notion of the *ba*^{3} holding schema. Study of the word *ba*^{3} and its different functions suggests that this word has as its basic meaning the action of holding or handling. In classical Chinese the single morpheme (character) *ba*^{3} meant to hold, and many compounds based on this character found in Mandarin have this meaning also. At the centre of *ba*^{3} is holding as an action. In addition, the existence of a number of *handle* nouns based on *ba*^{3} (or the tone-changed form *ba*^{4}) shows that the holding schema for the word *ba*^{3} has been extended to include nouns. That is, from the central meaning *to hold* has developed a secondary, nominalised function which might be expressed *something that is held or which facilitates holding*.

An extension of the subgroup of things that can be held is the class of items whose shape allows them to be held. These are the nouns which are used with the classifier *ba*^{3} in numerative or demonstrative noun phrases. This use of *ba*^{3} is thus a broadening of the holding schema from specific noun (*handle*) to general class (*diverse items which can be held in the hand*). This is consistent with the view advanced by several linguists (Sweetser, 1987; Bybee, 1988) that grammaticalisation brings with it the broadening of application and loss of specificity. Another classificatory use of *ba*^{3} which follows from this is the partitive function in counting handfuls of objects or mass nouns such as rice, sand, or chopsticks. This represents a broadening from the noun use (*that which is held*) through the noun classifier function (*groups of things whose shape suggests holding in the hand*) to the partitive use (*numbers of small items or quantities of mass nouns that can be held in the hand*, or *handfuls*).

In a similar vein, the central verbal meaning of *ba*^{3} is extended into a verb classifier for actions associated with the hand. Thus, single, brief actions such as *squeeze*, *seize*, *pull*, and even *help* are counted with the verb classifier *ba*^{3} in expressions analogous with the English, *he gave her hand a squeeze*. That actions such as *squeezing* are counted with *ba*^{3} suggests again that some broadening of scope has occurred from *to hold with the*

hand to *actions carried out with the hand*. These common uses of *ba*^{3} are thus united by an underlying notion of holding. It is noteworthy that no study in the literature appears to make this claim, and argue that the meanings and functions of *ba*^{3} are linked by a holding schema. This line of reasoning constitutes a new application of cognitive linguistics in that it exploits the notion of radial categories and category extension (Lakoff, 1987) to examine all the meanings of *ba*^{3}.

However, an even more radical application of cognitive grammar promotes the claim that the *ba*^{3} disposal construction (Wang Li, 1947) is also an extension of the holding schema; in this case the action of holding has been mapped from the physical to the control domain (Langacker, 1987). While the uses of *ba*^{3} discussed above rely predominantly on several chainings from the central physical holding meaning of *ba*^{3}, the disposal construction employs a metaphorical form of holding. When physical holding is mapped to the control domain it adopts the sense of dealing with or the power to influence; this is in agreement with Thompson's (1973) interpretation of the ba-construction as answering the question, *What did the causer do to X?* where X is the object of the ba-sentence. Fundamentally then, the ba-construction describes how the causer interacted with or dealt with the object, which brings us back to the original perspective of Wang Li in 1947.

In this study examples of ba-sentences were taken from modern Chinese literature and examined for fulfillment of five requirements advanced by many of those who have studied the ba-construction to date (Wang Li, 1947; Lu, 1948; Wang Huan, 1963; Hopper & Thompson, 1980). The five criteria, animate agent, definite object NP, volitional action, physical action, and completeness were all linked with the holding schema in one way or another. Concisely put, the human agent is the prototypical holder, who acts volitionally. In addition, the disposal use of *ba*^{3} requires a definite object, over which control or the power to influence can be exercised, physically or mentally. Also, just as physical holding lies at the heart of the holding schema, so the prototypical result of dealing with something

is the bringing about of some observable, physical change. Finally, if a causer interacts with the object of a ba-sentence, the effect of such an interaction would, prototypically, be complete. The best exemplar of an action is surely a finished and complete one. The five ba-criteria are thus inextricably linked to the holding meaning of *ba*^{3}.

The ba-sentences examined in this study constitute strong support for both prototypicality and the holding schema. It was found that half of them (46 sentences) met all five ba-criteria, and a further 36 (out of a total of 90 sentences) met three or four of them. In terms of frequency of occurrence, the requirements for an animate agent, a definite object NP, and a volitional action were most important; these three were most often found fulfilled together. It would appear that the prototypical ba-sentence has these three elements.

In the same way the verbal elements at the end of ba-sentences are also related to the meaning of *ba*^{3} and the holding schema. Just as the prototypical action brings about a complete result in the physical realm, so the verbal elements express what happened to the object as a result of its interaction with the causer. The resultative, directional, locational, retained object, patient/beneficiary, and numeral and measure verbal elements all describe the final status of the object NP after the causer has dealt with or influenced it. In addition, the most commonly occurring verbal elements were resultative, directional, and locational, together more than 75 percent of the verbal elements found. This is strong support that ba-sentences describe how an object was dealt with or handled. Dealing with or influencing an object to produce the result summarised in the verbal element is a metaphorical handling or holding.

The linking of all the functions of *ba*^{3} to a holding schema operating in the physical and control realm has shown that *ba*^{3} is a natural category with a radial structure. This is to be expected from Lakoff's (1987) and Langackers's (1987) theories about the nature of language. The *ba*^{3} natural category is structured around the action of holding and the objects associated with this action. The connections between the different meanings of the

word *ba³* argue convincingly that the relationship between verb, noun, classifier, and disposal uses of *ba³* is polysemy. Also, the structure of the category associated with *ba³* is radial, with extensions from a central verbal action to nominalised concepts with differing degrees of specificity. There are also generalisations of actions performed with the hand, and metaphorical extensions from the physical to the control domain; the control use of *to hold* is a metaphorical analogue of the physical activity of holding or grasping. The interrelated meanings and functions of *ba³* have been established by considering the meaning of the word, and making this a vital element in the investigation. Clearly then, this study argues against the separation of syntax and semantics. Syntax is not independent of semantics, and although some loss of specificity is a consequence of grammaticalisation, meaning is essential if we are to discover how a language is structured and why there are restrictions on the use of certain grammatical markers or functors.

2. Implications.

As this study has attempted to show, language is a complete whole and must be treated as such; the separation of syntax and semantics is artificial and robs the researcher and student of important information. If the view taken by cognitive linguists and supported by research work which is in broad agreement with this thesis is correct, then much of our understanding of language may need to be refined or adjusted. This would have implications for both theoretical and applied linguistics.

Much progress has been made by the functional and cognitive linguistics schools in setting a new agenda for the study of language. It is to be hoped the integration of syntax and semantics might shed new light on language structure and stimulate more research on problem areas in language. The phenomenon of grammaticalisation is widespread cross-linguistically and is a good example of the results of mixing syntax and semantics. Instead of looking at grammatical functors as being empty of meaning and arbitrary, we should

investigate their development by looking at their meaning in other contexts, just as was done for *ba*^{3} in this thesis.

In addition, language teaching could benefit from this more holistic, cognitive view of language. The most obvious application of the material in this study is for the teaching of the ba-construction to learners of Chinese. Instead of presenting students with examples of standard sentences and their *ba*^{3} equivalents, explaining that *ba*^{3} moves the object forward in the sentence, teachers could begin teaching this important grammatical construction by looking at the meaning of the word. Students could be taught that the disposal construction describes how an object is dealt with by the causer, and the ba-criteria could be explained with reference to the notion of holding. In this way, learners could dispense with rules and develop schema, leading to a greater feeling for the language.

In a similar way, just as *ba*^{3} could be explained by considering its meaning and the consequent restrictions on its use, so English prepositions could be taught to ESL/EFL students. Many English prepositions represent categories of related meanings chained from a central member. For example, the preposition *in*, in *A is in B* might have at its centre the concept of two nouns A and B, where B is larger than A and encloses it. From this physical relationship can be chained temporal uses such as *I'll see you in five minutes*. The transfer into the temporal domain makes B a length of time which encloses the time within which A, the seeing of the person, can occur. Further chainings could explain metaphorical uses such as *He's in a lot of trouble*. Here the subject A is surrounded and enclosed by trouble, and is thus *in* it. Similar reasoning applies to expressions such as *She's in a bad mood*, as well as a host of phrasal verbs and verbs with prepositions, such as *join in, pitch in, look into, sweep into, fall in*, and so on.

Although studies referred to in this thesis have looked at prepositions from this point of view (Brugman, 1981; Dewell, 1994), these have been for the benefit of theoretical linguists. The findings of this investigation of *ba*^{3} and the holding schema should be

applied to English prepositions with the intention of teaching them to language learners. It would not be necessary for students to carry out large studies of schemas and mappings between domains; what is needed is an understanding of the general principles used in this study, and consideration of the meaning of prepositions. Language teachers could familiarise themselves with the ideas of central members and extensions from the physical into the temporal, mental, or control domains, and present prepositions as clusters of related meanings. When we teach grammar and the teaching of grammar to prospective teachers, why not equip them with the tools to develop their own models with which to teach their students?

In short, cognitive linguistics relies on the placing of language within the general cognitive faculties of the human mind to represent linguistic information in a manner more consistent with the reality present in the brain of every person. Bringing our models of language more into tune with the mental reality available to native speakers of a language must surely aid in researching in natural language and improving second language instruction. It is to be hoped that this thesis, which deals with the single word *ba*^{3} (把) in Chinese, has made a small contribution to this process of development.

References.

Adams, K. L., & Conklin, N. F. (1973). Toward a theory of natural classification. Paper presented at the meeting of the Chicago Linguistic Society, 9th Session.

Allan, K. (1977). Classifiers. Language, 53(2), 285-311.

Bennett, P. A. (1981). The evolution of passive and disposal sentences. Journal of Chinese Linguistics, 9(1), 61-89.

Bloomfield, L. (1914). An introduction to the study of language. New York: H. Holt and Company.

Bloomfield, L. (1930). Linguistics as a science. Studies in Philology, 27, 553-557.

Brugman, C. (1981). Story of over. Unpublished master's thesis, University of California, Berkeley.

Bybee, J. L. (1988). Semantic substance vs. contrast in the development of grammatical meaning. Proceedings of the Annual Meeting of the Berkeley Linguistics Society, 14, 247-264.

Chafe, W. (1970). Meaning and the structure of language. Chicago, IL: University of Chicago Press.

Chao, Y. R. (1968). A grammar of spoken Chinese. Berkeley, CA: University of California Press.

Cheung, S. H. (1973). A comparative study in Chinese grammars: The ba construction. Journal of Chinese Linguistics, 1(3), 343-382.

Chomsky, A. N. (1957). Syntactic structures. The Hague: Mouton.

Chomsky, A. N. (1965). Aspects of the theory of syntax. Cambridge, MA: MIT Press.

Chomsky, A. N. (1988). Language and problems of knowledge: The Managua lectures. Cambridge, MA: The MIT Press.

Coleman, R. G. G. (1990). Latin and the Italic languages. In B. Comrie (Ed.), The world's major languages (p.180-202). Oxford: Oxford University Press.

Coleman, L., & Kay, P. (1981). Prototype semantics: The English word *lie*. Language, 57(1), 26-44.

Comrie, B. (1990). Russian. In B. Comrie (Ed.), The world's major languages (p.329-347). Oxford: Oxford University Press.

Concise English-Chinese Chinese-English Dictionary. (1987). Hong Kong: Oxford University Press.

Croft, W. A. (1994). Semantic universals in classifier systems. Word, 45(2), 145-171.

Delancey, S. (1986). Toward a history of Tai classifier systems. In C. Craig (Ed.), Noun classes and categorization (p.437-452). Amsterdam: John Benjamins.

Dewell, R. B. (1994). Over again: Image-schematic transformations in semantic analysis. Cognitive Linguistics, 5(4), 351-380.

Dixon, R. M. W. (1986). Noun classes and noun classification in typological perspective. In C. Craig (Ed.), Noun classes and categorization (p.105-112). Amsterdam: John Benjamins.

Downing, P. (1984). Japanese numerical classifiers: Syntax, semantics, and pragmatics. Unpublished doctoral dissertation, University of California, Berkeley.

Fillmore, C. (1968). The case for case. In E. Bach & R. T. Harms (Eds.), Universals in linguistic theory. New York: Holt.

Fillmore, C. (1982). Towards a descriptive framework for spatial deixis. In R. J. Jarvella & W. Klein (Eds.), Speech, place, and action (p.31-59). London: John Wiley.

Frei, H. (1956). The ergative construction in Chinese: Theory of Pekinese pa. Genko Kenkyu, 31, 22-50.

Halliday, M. A. K. (1985). Introduction to functional grammar. London: Edward Arnold.

Hashimoto, A. Y. (1971). Mandarin syntactic structures. Unicorn, 8, 1-149.

Hawkes, D. (1987). A little primer of Tu Fu. Hong Kong: Renditions Paperbacks.

He, J. (1993). Xiandai Hanyu mohu liangci de yuyi fenxi [A semantic analysis of fuzzy classifiers in modern Chinese]. Hanyu Yanjiu, 3(1), 187-197.

Her, O. (1990). Historical development of ba and jiang in the Tang dynasty. Language Variation and Change, 2(3), 277-94.

Hoard, J. E. (1979). On the semantic representation of oblique components. Language 55(1), 319-332.

Hopper, P. (1986). Some discourse functions of classifiers in Malay. In C. Craig (Ed.), Noun classes and categorization (p.309-326). Amsterdam: John Benjamins.

Hopper, P., & Thompson, S.A. (1980). Transitivity and grammar in discourse. Language, 56(2), 251-299.

Hsieh, H. (1978). Chinese as a pictorial language. Journal of the Chinese Language Teachers Association, 13(2), 167-172.

Hsieh, H. (1989). Time and imagery in Chinese. In J. H. Y. Tai & Frank F. S. Hsueh (Eds.), Functionalism and Chinese grammar (p.45-94). Columbus, OH: Chinese Language Teachers Association.

Hsueh, F. F. S. (1989). The structural meaning of ba and bei constructions in Mandarin Chinese: Do they really mean disposal and passive? In J. H. Y. Tai & Frank F. S. Hsueh (Eds.), Functionalism and Chinese grammar (p.95-125). Columbus, OH: Chinese Language Teachers Association.

Huang, S. (1974). Mandarin causatives. Journal of Chinese Linguistics, 2(3), 354-369.

Huang, S. (1986). The history of the disposal construction revisited - evidence from Zen dialogues in the Tang dynasty. Journal of Chinese Linguistics, 14(1), 43-52.

Hyman, L. (1975). On the change from SOV to SVO: Evidence from Niger-Congo. In C. Li (Ed.), Word order and word order change (p.113-147). Austin, TX: University of Texas Press.

Lakoff, G. (1987). Women, fire, and dangerous things: What categories reveal about the mind. Chicago, IL: University of Chicago Press.

Langacker, R. W. (1987). Concept, image, and symbol: The cognitive basis of grammar. Berlin: Mouton de Gruyter.

Li, C. (1976). Subject and topic. New York: Academic Press.

Li, C. & Thompson, S. A. (1981). Mandarin Chinese: A functional reference grammar. Berkeley, CA: University of California Press.

Li, C. & Thompson, S. A. (1990). Chinese. In B. Comrie (Ed.), The world's major languages (p.811-833). Oxford: Oxford University Press.

Li, D. & Cheng, M. (1990). A practical Chinese grammar for foreigners. Beijing: Sinolingua.

Li, Y. C., & Yip, M. (1979). The ba construction and ergativity in Chinese. In F. Plank, (Ed.), Ergativity: Towards a theory of grammatical relations. New York: Academic Press.

Lin, H.T. (1981). Essential grammar for modern Chinese. Boston, MA: Cheng & Tsui Company.

Liu, D. (1978). Chinese-English dictionary. New York: The Asian Associates.

Lü, S. H. (1948). On the uses of the pre-transitive pa. Bulletin of Chinese Studies, 8, 111-130.

Lü, S. H. (1984). Xiandai Hanyu babai ci [Eight-hundred words in modern Chinese]. Beijing: Commercial Press.

Mithun, M. (1986). The convergence of noun classification systems. In C. Craig (Ed.), Noun classes and categorization (p.379-398). Amsterdam: John Benjamins.

Norman, J. (1988). Chinese. Cambridge: Cambridge University Press.

Ramsey, S. R. (1987). The languages of China. Princeton, NJ: Princeton University Press.

Robins, R. H. (1990). A short history of linguistics. London: Longman.

Rosch, E. (1973). Natural categories. Cognitive Psychology, 4, 328-350.

Rosch, E. (1977). Human categorization. In N. Warren (Ed.), Studies in cross-cultural psychology. New York: Academic Press.

Rosch, E., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. Cognitive Psychology, 7, 573-605.

Ross, J. R. (1973). Nouniness. In O. Fujimura (Ed.), Three dimensions of linguistic theory (p.137-258). Tokyo: TEC Corporation.

Sampson, G. (1980). Schools of linguistics. Stanford, CA: Stanford University Press.

Song, Y. (1981). Guanyu ba zi ju de liang ge wenti [Concerning two problems in ba-sentences]. Yuwen yanjiu, 2, 39-43.

Stimson, H. M. (1976). Fifty-five Tang poems: A text in the reading and understanding of Tang poetry. New Haven, CT: Far Eastern Publications, Yale University.

Sun, C. (1988). A case study of grammaticalisation: The grammatical status of de, le, and ba in the history of Chinese. Unpublished doctoral dissertation, Cornell University, Ithaca, NY.

Sweetser, E. (1987). Metaphorical models of thought and speech: A comparison of historical directions and metaphorical mappings in two domains. Proceedings of the Annual Meeting of the Berkeley Linguistics Society, 13, 446-459.

Tai, J. H. Y. (1985). Temporal sequence and Chinese word order. In J. Haiman (Ed.), Iconicity in syntax. Amsterdam: John Benjamins.

Tai, J. H. Y. (1989). Toward a cognition-based functional grammar of Chinese. In J. H. Y. Tai & Frank F. S. Hsueh (Eds.), Functionalism and Chinese grammar (p.186-224). Columbus, OH: Chinese Language Teachers Association.

Teng, S. (1975). A semantic study of transitivity relations in Chinese. University of California Publications in Linguistics, Volume 80. University of California Press.

Thompson, S. A. (1973). Transitivity and some problems with the ba construction in Mandarin Chinese. Journal of Chinese Linguistics, 1(2), 208-221.

Tiee, H. H. Y. (1986). A reference grammar of Chinese sentences. Tucson, AZ: The University of Arizona Press.

Traugott, E. (1982). From propositional to textual and expressive meanings: Some semantic-pragmatic aspects of grammaticalisation. In W. P. Lehmann & Y. Malkiel (Eds.), Perspectives on historical linguistics (p. 245-271). Amsterdam: John Benjamins.

Van Oosten, J. (1984). Subject, topic, agent, and passive. Unpublished doctoral dissertation, University of California, Berkeley.

Vendler, Z. (1967). Linguistics in philosophy. Ithaca, NY: Cornell University Press.

Wang, H. (1963). Ba sentences and bei sentences. Ohio State University POLA, 4, 61-102.

Wang, H. (1984). Ba zi ju yu bei zi ju [Ba sentences and bei sentences]. Shanghai: Shanghai Educational Publishers.

Wang, L. (1947). Zhongguo yufa lilun [The theory of Chinese grammar]. Shanghai: Commercial Press.

Wang, M. (1987). Transitivity and the ba construction in Mandarin. Unpublished doctoral dissertation, Boston University, Boston, MA.

Appendices

Appendix A.

Grammatical Abbreviations.

PERF - perfective aspect marker, *le*^{4} (了), attached to verb phrases.

LOC - stative verb showing location, *zai*^{4} (在), usually followed by a noun phrase plus a locational suffix.

CLF - noun classifier.

POSS - possessive marker, *de* (的), which follows the noun.

NEG - negative particle, *bu*^{4} (不), placed before the verb.

EXT - extent marker, *de*^{2} (得) links an adverbial of extent to the verb.

ADV - suffix *de* (地) attached to polysyllabic adjectives to form an adverbial.

NOM - nominalising morpheme *de* (的), attached to adjectives to form nouns.

DEM - demonstrative marker, usually *zhei*^{4} (這) and *nei*^{4} (那), *this* and *that*, respectively.

CON - continuous aspect marker *zhe* (著).

Appendix B.

Dictionaries Consulted.

Chik, H. M., & Ng, L. S. Y. (1989). Chinese-English dictionary. Hong Kong: Chinese University of Hong Kong.

Concise English-Chinese Chinese-English Dictionary. (1987). Hong Kong: Oxford University Press.

Liu, D. (1978). Chinese-English dictionary. New York: The Asian Associates.

Modern Chinese-English dictionary. (1988). Beijing: Foreign Language Teaching and Research Press.

Xinhua zidian [New China dictionary]. (1990). Beijing: Commercial Press.

Appendix C.

Sources of Ba-Sentences and Length of Texts.

Shi² Bao⁴ Zhou¹ Kan¹ [China Times Weekly] (1992, February).

1800 characters.

Elegy for a cat. (1994, February). Hai³ Wai⁴ Xiao⁴ Yuan² [Overseas Campus], p. 8.

4200 characters.

Hsu, V. L. (1988). A reader in post-cultural revolution Chinese literature. Hong Kong: The Chinese University Press.

18800 characters.

Li, Z., & Wang, S. (Eds.). (1988). Newspaper Chinese ABC: An introductory reader. Boston, MA: Cheng and Tsui Company.

800 characters.

Main offender found guilty on all eight counts. (1994, February 23). Shi⁴ Jie⁴ Ri⁴ Bao⁴ [World Journal], p.A5.

4100 characters.

Mei³ Hua² Bao⁴ Dao³ [Mee-Hwa Report] (1990, October).

5100 characters.

Mei³ Hua² Bao⁴ Dao³ [Mee-Hwa Report] (1991, July).

3000 characters.

Readings from Chinese writers 1919-1949. (1989). Beijing: Sinolingua.

5600 characters.

Appendix D.

Sources of English *Hold* Sentences.

In Chapter Four the four examples of holding sentences in English were taken from the following articles in Reader's Digest.

[4.1] came from: Fire aloft! (1983, January). Reader's Digest, p. 57.

[4.2] came from: Capsized! (1993, July). Reader's Digest, p. 196.

[4.3] came from: We must get tough with killer kids. (1993, June). Reader's Digest, p. 103.

[4.4] came from: I lost my partner. (1993, July). Reader's Digest, p. 49.

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