Some thoughts on unselected binding and Chinese conditionals
Paul Law
ZAS, Berlin

In this talk I explore an account for certain cases of pronominal binding in which the semantic type of the binder does not match that of the bindee. In particular, I will look at binding of pronouns in generic and donkey sentences. I argue against the view that these can be bound by an adverb of quantification (Q-adverb), and consider the possibility that binding in such cases is but a logical consequence of the set-theoretic relation between the denotation of the restriction and that of the nuclear scope. An appeal of this approach is that we need not rely on the conceptually unjustified assumption that binding is indiscriminate, i.e., it is possible between different morpho-syntactic categories and semantic types. We can thus eliminate generic and donkey sentences as evidence of an imperfect match between syntax and semantics.

Diesing (1992) proposes that the VP is the nuclear scope, while the restriction is the material outside of the VP. Along these lines, a sentence like (1a) would get its interpretation from the representation in (1b), where $t_i$ and $t_j$ are the traces of the DPs *a cat* and *a mouse* respectively (a result of LF-raising):

(1) a. A cat always chases a mouse.
   b. always [ a cat, a mouse ] [ $t_i$ chases $t_j$ ]
   c. $\forall x \forall y$ [ [ $\text{cat}(x) \land \text{mouse}(y)$ ] $\rightarrow$ [ $x$ chases $y$ ] ]

The problem with the representation in (1b) is that it is not at all clear what the relation is between the quantificational adverb (Q-adverb) *always* and the first bracketed part that is the restriction, since quite independently Q-adverbs generally do not occur in DPs (cf. *an always cat*) syntactically. Semantically, the Q-adverb *always* does not quantify over (individual-denoting) properties. Thus, while the logical formula in (1c) seems to have the same truth-conditions as those for (1a), it is unclear whether it is due to the Q-adverb *always* quantifying over individuals, or to it simply being a logical consequence of the proper interpretation of (1a).

A similar problem arises in the interpretation of bare conditionals in Chinese. There is little reason to suppose that the necessity operator NEC binds the individual-denoting variables, although the logical formula in (1c) seems to have the same truth-conditions as those for the conditional sentence in (2a):

(2) a. shei xian jinlai, wo xian da *(shei)/*ta/*nage ren.
   who first enter I first hit who/3SG/that person
   ‘If X enters first, I hit X first.’
   b. NEC; [ who, first entered ] [ I hit who, first ]
   c. $\forall x$ [ $x$ first entered ] [ I hit $x$ first ]

Semantically, the necessity operator NEC does not take (individual-denoting) properties as argument, and syntactically can hardly occur in a human indefinite DP (cf. *a necessarily man*).

I argue that the logical formulae in (1c) and (2c) are simply logical consequences of the interpretations of the (possibly hidden) Q-adverbs *always* and *necessarily*. More specifically, I suggest that these take a proposition $p$ as argument, sending it to true just in case $p$ is true in every possible world. Thus, (1a) is true just in case the generic statement *a cat chases a mouse* is true in every possible world, and (2a) is true just in case the conditional is true in every possible world. Moreover, I propose that open sentences may be turned into properties by $\lambda$-abstracting over the unbound variables. Thus, the conditional in (2a) is true in a world $w$ iff in $w$ the property denoting the antecedent clause is a subset of the property denoting the consequent clause. It is by virtue of this subset relation that the variable in the antecedent clause and that in the consequent clause are the same, giving rise to the impression that they are bound by the same operator.