We present a unified analysis of Mandarin non-interrogative *wh*'s that have both universal and existential uses. *Wh*'s are argued to be existential, and the two uses corresponds to distinct types of alternatives activated by the existential, as is in the framework of Chierchia (2013). Distribution and interpretation of the two types of *wh*'s follow from their interaction with the particle *dou* and competition between them.

**Universal *wh*'s with *dou*** Mandarin *wh*'s, when appearing before *dou*, have universal (or free choice) interpretation (Giannakidou & Cheng 2006, a.o.), illustrated in (1). Predicates participating in the construction can be positive episodic, negated, $\Diamond$ or $\Box$-modalized.

(1) *Lisi nage.laoshi$_i$ dou [$_{VP}$ qing.le/mei.qing/neng.qing/bixu.qing $t_i$].*
Lisi which.teacher DOU invite.ASP/not.invite/can.invite/must.invite $t_i$
'Every teacher is such that Lisi has/didn't/can/must invite her.'

We adopt Liu's (in preparation) analysis of universal-*wh*'s where *wh*'s are existentials, and the universal force is generated by covert exhaustification (Fox, 2007; Chierchia, 2013), independently needed for free choice disjunction and triggered by *dou* to satisfy its EVEN presupposition (Liao 2011; Liu 2017, cf. Xiang ms). The implementation follows Crnič's (2017) analysis of English *any*. Below, *dou* as in (2a) takes a *B*(ackground) and a *F*(ocus) as its arguments, presupposes that the result of applying $B$ to $F$ entails those of applying $B$ to alternatives of $F$, and returns $B(F)$ if the presupposition is met. *Wh*'s are existentials (2b) with sub-domain alternatives (2c). Next, *wh*'s domain argument $D$ is focused and moves to the specifier of *dou* as in (2e), and alternatives of $D_F$ are its subsets. For the prejacent of *dou* to entail all other alternatives, recursive exhaustification is employed (the underlined part in (2e)), turning a existential statement containing [*nage* $t_3$] into a universal one.

(2) a. $[\![dou]\!]^g = \lambda B \lambda F \lambda w : \forall F' \in Alt(F)[F \neq F' \rightarrow B(F) \subset B(F')].\, B(F)(w)$
b. $[\![nage\ D]\!]^g = \lambda P \lambda Q \lambda w \exists x \in D[P(w)(x) \wedge Q(w)(x)]$
c. $ALT_D$ of $[\![nage\ D]\!] = \{\lambda P \lambda Q \lambda w \exists x \in D'[P(w)(x) \wedge Q(w)(x)] \mid D' \subseteq D\}$
d. $[\![Exh\ C]\!]^g = \lambda p \lambda w[p(w) \wedge \forall q \in Excl(C,p)[p \not\subseteq q \rightarrow \neg q(w)]]$
e. $[D_F$ [*dou* [$\lambda 3$[*Exh* $C_2$][*Exh* $C_1$][$\Diamond$[Lisi invite [*nage* $t_3$ *teacher*]]]]]]

**Existential *wh*'s without *dou*** Without *dou*, *wh*'s appear in a wide range of modal and downward-entailing contexts, receiving existential interpretation and behaving like modal indefinites (Li, 1992; Cheng, 1994; Lin, 1998; Chen, 2017). Crucially, they convey partial variation, as is illustrated by their compatibility with the hide-and-seek scenario.

(3) The hide-and-seek scenario Alonso-Ovalle & Menéndez-Benito 2010
(Lisi and the speaker are playing hide-and-seek. Lisi is hiding, and the speaker thinks Lisi is hiding in one of the rooms in the house; but she is certain that Lisi could not be in the bathroom, because it is currently under construction and locked.)

a. *Zhangsan kending/keneng cang zai zhe fangzi de nage wu.li*
Zhangsan must/could hide in this house DE which room.in
"Zhangsan must/could be hiding in some room of the house."

b. # Zhangsan might be hiding in any room of the house. cf. English *any*

We follow Alonso-Ovalle & Menéndez-Benito's treatment of modal indefinites taking these *wh*'s to activate singleton alternatives, as in (4a). Exhaustifying singleton alternatives in (4b) gives rise to partial variation. We omit the technical details here but offer an

intuitive understanding of the process: total free choice is stronger than partial variation; since exhaustifying the entire domain results in free choice/universal as in (2), reducing it to the set of singletons leads to a weakening to partial variation (since negating less).

(4) a. $ALT_{Ds}$ of $[\![nage\ D]\!] = \{\lambda P \lambda Q \lambda w \exists x \in \{u\}[P(w)(x) \wedge Q(w)(x)] \mid \{u\} \subseteq D\}$
b. $[Exh\ C_2][Exh\ C_1][\Diamond$[Lisi hide in [*nage D room*]]]

We also note that the criticisms raised by Giannakidou & Lin 2016 against Chierchia & Liao 2014 are avoided. G&L criticize C&L for positing almost identical semantics for existential-*wh*'s and English *any*, and this is problematic since the two have different behaviours (compare (3a) and (3b)). We do not suffer from the criticisms since we take existential-*wh*'s as activating singleton alternatives and triggering partial variation, similar to Spanish *algún* and different from a total variation item such as English *any*.

**Choices of alternatives and competition** Two types of alternatives have been employed to characterize the two uses of Mandarin *wh*'s. Specifically, *wh*'s activate total domain alternatives (2c) in the presence of *dou* while *dou*'s absence leads to singleton domain ones (4a). These choices are not arbitrary. The former is required by *dou* since exhaustifying it (but not the singleton ones) would lead to a universal construe satisfying *dou*'s requirement. The latter is required in the absence of *dou* since (as we argue) *wh-dou* and plain *wh*'s are competitors (or alternatives). The use of a plain *wh* suggests that the context does not support a *wh-dou* construction, and thus does not support a universal construe; singleton alternatives are hence triggered to avoid the universal reading.

**The insignificant reading of *wh*'s under negation** The competition story sheds light on the *insignificant* reading of Mandarin *wh*'s under negation (Huang, 2013). As is reported in Huang (2013) and shown in (5a), the use of a plain *wh* under negation only negates things that are significant (valuable and/or new stamps), in contrast with the *wh-dou* in (5b), which targets the entire domain. The contrast follows if we take plain *wh*'s and *wh-dou* to be competitors: the use of *dou* in *wh-dou* enforces a maximal domain (to satisfy *dou*'s presupposition), while the use of a plain *wh* suggests the context does not support a statement with the maximal domain, and thus a smaller (significant) domain is picked.

(5) a. *Wo mei.you shenme youpiao, zhiyou yixie hen lao de.*
I NEG.have what stamp, only have some very old
"I hardly have any stamps, only some old ones."

b. *Wo shenme youpiao dou mei,you, ∗zhiyou yixie hen lao de.*
I what stamp DOU NEG.have, only have some very old
"I don't have any stamps, ∗only some old ones."

***Wh*'s are not variables** Finally, we present evidence showing Mandarin *wh*'s do not manifest *quantificational variability* and thus cannot be treated as Heimian indefinites subject to external quantification. *No-QV* holds for both *wh-dou* and plain *wh*'s. (6) is an example with *dou*. (6a) shows a *dou*-sentence is compatible with qv, while (6b) shows a *wh-dou* is not. Therefor, a *wh* must have its own Q-force and thus not subject to QV.

(6) a. *Yi.ge erci.fangcheng tongchang dou you liang.ge jie.*
a.CL quadratic.equation usually DOU have two.CL solutions
"A quadratic equation usually has 2 solutions."

b. *Na.zhi xiong (∗tongchang) tiji dou henda.*
which.CL bear usually size DOU big
"Every bear is (∗usually) big in size."

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