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Shing S So* (so@ucmo.edu). *Nets and Upper and Lower Semi-Continuities.*

Let S be a net of sets with domain D and t be a net with domain E . Then t is called an \in -subnet of S , denoted by $t \leq_{\in} S$, if for each $n \in D$, there exists a $m \in E$ so that for each $p \geq m$ there is a $q \geq n$ such that $t_p \in S_q$. Similarly, $S \leq_{\ni} t$ means that for each $m \in E$, there exists a $n \in D$ so that for each $q \geq n$, there exists a $p \geq m$ such that $t_q \in S_p$. Furthermore, t is called a *reversible \in -subnet of S* if $t \leq_{\in} S$ and $S \leq_{\ni} t$.

In this paper, we discuss the upper and lower semi-continuities of multifunctions by means of \in -subnets and reversible \in -subnets. (Received September 11, 2013)