Shing S So\* (so@ucmo.edu), Dept. of Math. & Comp. Sci., University of Central Missouri, Warrensburg, MO 64093. Some Extensions of Semi-closure Spaces. Preliminary report.

Let X be a nonempty set and P(X) the power set of X. A single-valued function c of P(X) into P(X) is called a semi-closure operator on X if it satisfies the following conditions:

C1. 
$$c(\emptyset) = \emptyset$$
,

C2.  $A \subset c(A)$  for each  $A \in P(X)$ ,

C3. for each  $A, B \in P(X)$ ,  $A \subset B$  implies  $c(A) \subset c(B)$ , and

C4. c(A) = c(c(A)) for each  $A \in P(X)$ .

The pair (X, c) or simply X is called a *semi-closure space*.

In this paper, we will discuss some extensions of semi-closure spaces. (Received September 15, 2008)