

**ABSTRACT.** Let  $M$  be a (linear) subspace of the normed linear space  $X$ . The metric projection onto  $M$  is the set-valued mapping  $P_M : X \rightarrow 2^M$  defined by

$$P_M(x) = \{y \in M \mid \|x - y\| = \inf_{m \in M} \|x - m\|\}.$$

$M$  is called proximal (resp. Chebyshev) if  $P_M(x)$  contains at least (resp. exactly) one point for each  $x$  in  $X$ . A linear selection for  $P_M$  is a linear map  $p : X \rightarrow M$  such that  $p(x) \in P_M(x)$  for every  $x$ . It is easy to verify that every linear selection is a projection in the usual sense, i.e.  $p^2 = p$  and  $p$  is continuous. (In fact,  $\|p\| \leq 2$ ). Thus linear selections are a special kind of continuous selection for  $P_M$ .

The purpose of this note is to provide a brief exposition of some of the results of [3] and to list some open problems. Full details along with related material can be found in [3].