



\$EDQW ,)]HW %D\VD0 XQNYHUUVLW\ %ROX 7  
&RUUHVSRRGLQ%HGXLWIKBQ \*\*OWHSH \$EDQW ,)]HW %D\VD0 8QLYHUVLW%ROROXDQXUNGHWSO#KRWPDL0 (F  
5HF GDWDHU \$FF GDWDHU 3XE GDWDHU  
&RS\ULJKW \*•OWHSH % HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WKH WHUPV F  
XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXU

(  
VXH LW~KDOFHHQ ZHOO GRFXPHQWHG WKDW PXVLF  
)RU RYHU WZR GHFDGHV UHVHDUFKHUV KDYH  
PRRGHWWHWPXVLF  
HPRWLWRQDWRIRU  
\ DSSOLFDWLRQV LQ EHKDYLRXUDO VFLHQFHV  
LWXVFRFRQBXHQSHRSO  
G WKHVH PRRG FKDQJHV FDXVH WKH GHVLUHG UHVSRRQH  
U H[DPSOH SHRSOH ZKR OLVWHQHG WR SRVLWLYH PXVLF  
RSOH ZKR OLVWHQHG WR QHXWUDO PXVLF > @

GLVFUHHW HPRWLWRQV H J VDG KDSSLQHVV DQJHU  
LWHRRRHWKHWRRWVDPQHGWSHDPXDLV IROUWHUPVXRILUWV  
H YDOHQFH )RU H[DPSOH SRVLWLYH PXVLF FRXOG DOWHU

DRJ\  
U DUWV

RQ RI LW LQ YDULRXV

UHVSRQVH 6RPH

LPXODWLRQ