

GRPHVWLF VRLQ\ ZKLV SD\$HU DGGUHVHV \$O
SRSXODWLRQV E\ KHDOWK FDUH ZRUNHUV



.H\ZRUGEROD 7HUURULVP %LRWHUURU 5DGLFDO +HDOWKFDUH 6XLFLGH
\$WWDNFN 2XWEUHDN 6XUYHLOODQFH 9LUXV 7UDYHO /DERUDWRU\ &OLQLFDO
+RVSLWDO &RPPXQLFDEOH GLVHDSVH

,QWURGXFWRQ

\$OWKRJK PRVW WHUURU FDUH DGGUHVHV WKH XVH RI
H[SORVLYHV LQ HDVLO\ GLVHPLQDWHG RI GDPDJH DQG SDQLF KDYH
EHHQ HPSOR\HG VDULQ DOWR SD\ RORERIDFN QJV RI
DGGUHVHV WKH GLVHDSVH (YHQ LQ WKH
FRQWLQHQWDO 8QLWHG 6WDWHV KHDOWK FDUH ZRUNHUV FDQ EHFRRPH LQIHFWHG
VHHQ ZKHQ 1XUVH 1LQD 3KDP EHFDPH LOO ZKLOH FDULQJ IRU DQ (EROD
SDWLHQW LQ SD\ DUH DGGUHVHV VFHQDULRV E\ ZKLFK (EROD YLUXV
FRQG EH SXUSRVHO\ GLVVHPLQDWHG LQWR XQVXVSHFWLQJ SRSXODWLRQV E\
KHDOWK FDUH ZRUNHUV

(EROD 9LUXV

(EROD YLUXV GLVHDSVH LV JRRQRWLF PHDQLQJ WKDW LW LQYROYHV ERWK
DQLPDOV DQG KXPQV %DWV DUH WKH UHVHUYRLU KRWW DQG FDQ WUDQVPLW W
YLUXV WR RWKHU DQLPDOV VXFK DV DSHV PRQNH\ DQWHORSHV DQG KXPQV
7UDQVPLVVLRQ FDQ DOVR RFFXU GXULQJ D VSLOO RYHU HYHQW LQ ZKLFK DQ
DQLPDO RU KXPQ FRQWUDFWV GLVHDSVH ERQWDFW ZLWK D EDW LPC@ öHPL

SDWKRJHQV DUH WKRVH WKDW SRVH WKH KLJKHVW ULVN WR QDWLRQDO VHFUXLW
SXEOLF KHDOWK EHFDSVH WKH\ FDQ EH HDVLO\ GLVVHPLQDWHG RU
WUDQVPLWWHG IURP SHUVRQ WR SHUVRQ WKH\ UHVXOW LQ KLJK PRUWDLW
UDWHV DQG KDYH WKH SRWHQWLDO IRU PDMRU SXEOLF KHDOWK LPSDFW PLJK
FDXVH SXEOLF SDQLF DQG VRFLDO GLVUXSWLRQ UHTXLUH VSHFLDO DFWRQ I
SXEOLF KHDOWK SUHSDUHGHVV > @ (EROD KDV EHHQ UHDSRQHG WR EH DQ
LPSUREDEOH PHFKDQLVP IRU ELRWHUURU > @ +LVWRULFDOO\ KRZHYHU WKHUH
KDYH EHHQ SURMHFWV WR GHYHORS LWV XVH DV D ELRORJLFDO ZHDSRQ 'XULQJ
WKH &ROG :DU WKH 6RYLHWV HGGHDYRXUHG WR FXOWLYDWH (EROD YLUXV ,W LV
NQRZQ ZKDW W\SH RI GHOLYHU\ PHFKDQLVP ZDV SODQQHG EXW WKH SURMHFW
ZDV HYHQWXDOO\ FDSDFHGHFXO@ \$XP 6KLQULN\R ZKR
LQIDRVO\ UHOHDVHG 6DULQ LQ D 7RN\R VXEZD\ VHQW PHPEHUV WR DLG WKH
'HPRFUDWLF 5HSXEOLF RI WKH &RQJH GXULQJ D (EROD RXWEUHDN

\$Q H[DP SOH RI GRPHVWLF WHUURU DZV RIRH DW HIGQ ZR W K HIG QZ LFADK (EROD LSD WKH
VKRRWLQJ DW)RUW +RRG 1LGRD HADFLNH QD QD QVZDVG DQ \$UIR\ SHUVRQV ZLWK
DQG SV\FKLDWULVW +H ZDV ERUQ DQG DQGRVH G DQV DDOLLH DQV\ ,QXWKLH LPRQW BFW
OHDGLQJ WR KLV NLOOLQJ RI DW D DEQBQFH H SHRPS ZRHWV ZHURH FVW DQES B H O V W V H
+DVDQ KDG EHHQ FRPPXQLFDWLQJ ZLW ELRZHWURD \$ZODN LPDD ZH DQEH DGGYHUWH
\$PHULFDQ LPDP ZKR ZDV D VHQLRU DQW DHDGN UNFEIXEWFIEDW LQJ BIDGLFDORLGRH
EHLQJ NLOOHG E\ D 8QLWHG 6VQD-W HZDFZURHDN LWUUK NYRFD QQS ZORNDLW VRFLHW\
SUHYDOHQW WKURXJKRXW WKH LQWHUQHW EORJV)DFHERRN <RX7XEH
6DXGLV RQFH UHIHUHG WR \$O \$ZODNL 5 PYHUHQHFW /DGHQ RI WKH LQWHUQHWG
> @ \$OWKRJK LW ZDV GHWHUPLQHG E\ WKH \$UP\ WKDW HPDLO HIFKDQJHV
EHWZHHQ +DVDQ DQG DO \$ZODNL ZHUH FRQVLVWHQW 6ZL'WKW D HAF D XG H M DV R P K DU
LQWHOOLJHQFH H[SHUWV EHOHYH WKDW W K H D W H L O O H U P L U X Y - \$ O R W K H U W K U H D W U
U H - D J V @ %ULHI UHYLHZ DQG UHFHQW XSGDWHV - &OL
&HQFLDZHUH DEDULQL 9 3LHWURSDROL 6 0DO

,Q \$EGXOKDNL 0XMDKLG 0XKDPDG SUHYDQXV D W H U R Z Q D V O H D U Q L Q J W K H
&DUORV /HRQ %OHGVRH JXQQHG GRZQ D VROGLHUXVGHVURQW RI D PLOLWDU\
UHFUXRVLHQXKDPDG ZDV ERUQ DQG UDLVH G H Q R O P S K D W W R Q 0)LWWHU ' %L O L Y
7HQQHVVH 3UHYLRXVO\ %DSWLW KH FRQYHUWHG WR R A B K H M Q V D W W P G K D (E R D
KH WUDYHOHG WR <HPHQ DQG ZRUNHG DV DQ (QJOLVK WHDFKHU 'XULQJ KLV
DUUHVW DW D <HPHQL URDGLGH FKHFNSRLQW LQ KH KDG RYHUVWD\HG KLV
YLVD DQG GLG QRW KDYH SURSHU GRFXPHQDWLRQ KH ZDV IRXQG WR SRVVHV
D FRXQWHUIHLW 6RPDOL SDVVSURW ERRNV DERXW H[SORVLYHV DQG ZULWLQJV E
DO \$ZODNL X K D P P D G Z D V D U U H V W H G L W Z D V G H W H U P L Q H G W K D W
KH KDG SODQQHG WR NLOO IDU PRUH SHRSOH EXW ZLWKRXW VXFFHVV 6LPLODU
DWWDFNV FDUULHG RXW E\ UDGLFDOLJHG LQGLYLGXDOV KDYH EHFRPH PRUH
IUHTXHQW , R y F Q I U S R P \ 9 L U J L Q L D D Q G D & K U L V W L D Q U D L V H G
\RXQJ PDQ IURP 7HQQHVVH FRXOG EHFRPH UDGLFDOLJHG DQG FRPPLW
PXUGHU LQ WKH QDPH RI ,VODP WKHQ D SHUVRQ IURP DQ\ GHPRJUDSKLF
FRXOG FRQFHLYDEO\ EHFRPH GRPHVWLF WHUURULVWV DV ZHOO :LWK VR PDQ\
LQGLYLGXDOV ZRUNLQJ LQ VHFUXLW\ DQG SXEOLF VDIHW\ VHQVLWLYH SRVLWLRQ
WKHUH DUH D SOHWKRUD RI DODUPLQJ VLWXDWLRQV WKDW D UDGLFDOLJHG SHU
FRXOG XQOHDVK

&RQFOXVLRQV

,W LV FOHDU WKDW DOWKRJK (EROD KDV \HW WR GHPRQVUDWH UHDO ZRUO
HvHFWLWV Q D V E L R R J L F D O Z H D S R Q L W V S R W H Q W L D O W R G H Y D V W D W H L V
LPPHQVH 5LVN I V R U W L D D O G R I G F X V R Q V H F X U L Q J (E R O D Y L U X V
LQ ERWK FOLQLFDO DQG ODERUDWRU\ VHWWLQJV VLPLODU WR ZKDW LV GRQH LQ
KLJK VHFUXLW\ ODERUDWRULHV VXFK DV ELRVDIHW\ OHYHO IRXU %6/ IDFLOLW
ZKHUH WKH ZRUOGdV PRVW GDQJHURXV SDWKRJHQV DUH VWXGLHG > @ \$W D
PLQLPXP LQGLYLGXDOV ZKR IUHTXHQWO\ FRPH LQ FRQWDFW ZLWK (EROD
YLUXV L H U H V H D U F K H U V V K R X O G U H F H L Y H V H F X U L W \ F O H D U D Q F H V W K D W L Q F O
EDFNJURXQG LQYHFWL R D V L R O X V V W Q V F R O O L G H O F H
LQFUHDVLQJ VXUYHLOODQFH RQ DQ\ KHDOWKFDUH ZRUNHU ZKR H[KLELWV
SRWHQWLDO IRU VHFUXLW\ FRJPSURFLDWH ZKHWKHU LW EH
SV\FKRORJLFDQ R V Q I G Y H R O R J I L F D O Y D Q F H G F K H F N V F R X O G
LQYROYH VWLQJ RSHUDWLRQV ZLWK LQWHOOLJHQFH RSHUDWLYHV GLVJXLVHG
UDGLFDOLJHG FLWLJHQV WR QRW RQO\ LGHQWL\ SHRSOH ZKR DUH ZLOOLQJ W
FRODERUDWH ZLWK WHUURULVWV EXW WR DQDO\H FRPSOLDQFH ZLWK UHSRU
SURFHGXUHV DV ZHOO 'XULQJ DQ RXWEUHDN VLWXDWLRQ FOLQLFDO KHDOWKFD