



# -RXUQDO RI ,QIHFWRXV 'LVHDVHV D 7KHUDS\

:DLQEHUJ DQG OHVSOqGH - ,QIHFW  
'2,

5HVHDFK \$UWLFOH

2SHQ \$F

,V 'UXJ 5HVLVWDQFH LQ )LUVW /LQH 7KHUDS\  
,QHYLWDEOH"

ODUN \$ :DLQEHUJ 7KLEBDX\$OqGH

OF\*LQOLYHUVLW\ \$,'6 &HQWUH /DG\ 'DYLV ,QVWLWXWH IRU OHGLFDO 5HVHDFK -HZLVK \*HQHUDO +RVSL  
&DQDGD

&RUUHVSROGLQJDIXWSKRDLQEHUJ OF\*LOO 8QLYHUVLW\ \$,'6 &HQWUH /DG\ 'DYLV ,QVWLWXWH IRU OHGLFDO  
&DWKHULQH ORQWUHDO 4XHEHF + 7 ( &DQDGD 7HO PDUN ZD\TEHUJ#PFJLORDFO

5HFHLYHG'BDMPEHU \$FFHSWHG GDWH 0DUFK 0D3JXFKOLVKHG GDWH

&RS\ULJKW < :DLQEHUJ 0\$ HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH €P 0 DÉ 0 Gm €P € D DÉ 0 p  
IRU WKHUDS\ E\ WKH )RRG DQG 'UXJ \$GPLQLVWUDWLRQ LQ WKH 8QLWHG 6WDWHV LQ 'ROXWHJUDYLU  
KDV QRW VHOHFWHG IRU UHVLVWDQFH PXWDWLRQV LQ WKH FOLQLF ZKHQ XVHG DV SDUW RI ILUVW OLQH  
WKDW WKLV LV GXH W0qUp€`0

D VLQJOH WDEOHW \$ QXPEHU RI UHDVRQV DFFRXQW IRU WKH IDFW WKDW WKH XVH RI  
WULSOH \$59 WKHUDS\ VLQFH KDV QRZ OHG WR UDWHV RI WKH UDASHXWLF

VXFFHVV WKDW KDYH LQFUHDVHG WR RYHU EDVHG RQ VXSSUHVVLRQ RI

SODVPD YLUHPLD WR EHORZ FRSLHV RI YLUDO 51\$ PO )LUVW DGKHUHQFH WR

\$59 UHJLPHQV LV QRZ IDU HDVLHU WKDQ SUHYLRXVO\ GXH WR WKH IDFW WKDW

GRVLQJ UHJLPHQV KDYH EHFRPH VLPSOLILHG RIWHQ EHFDXVH RI WKH XVH RI

FR IRUPXODWLRQV ZKLFK PD\ RQO\ QHHG WR EH WDNHQ RQFH GDLO\ 6HFRQG

\$59 UHJLPHQV KDYH EHFRPH IDU OHVV WR[LF DQG PRUH WROHUEOH RYHU WLPH

DQG WKLV KDV DOVR SURPRWHG DGKHUHQFH DV ZHOO DV GLPLQLVKHG WKH

OLNHOLKRRG RI GHYHORSPHQW RI +,9 GUXJ UHVLVWDQFH DJDLQVW LQGLYLGXDO

GUXJV > @ )LQDOO\ WKH GUXJV WKDW DUH QRZ XVHG LQ WKHUDS\ DUH IDU

PRUH SRWHQW WKDQ WKRVH WKDW ZHUH LQ XVH RQO\ \HDUV DJR DQG DUH

RIWHQ PHPEHUV RI QHZ GUXJ FODVVHV WKDW GLG QRW SUHYLRXVO\ H[LVW

7KLV QRWZLWKVWDQGLQJ WKH XVH RI \$59V LQ ILUVW OLQH UHJLPHQV KDV  
DOZD\V EHHQ DVVRFLDWHG ZLWK VRPH GHJUHH RI WUHDWPHQW IDLOXUH DQG GUXJ

UHVLVWDQFH ,QGHG VFLHQWLWVW KDYH PDSSHG RXW D ZLGH DUUD\ RI GUXJLQ WKHVH VVXGLHV DW  
51\$ PO ZKDW LV UHPDUNDEOH LV WKDW QRQH RI WKH SDUWLFLSDQWV GHYHORSHG

D VLQJOH GUXJ UHVLVWDQFH UHODWHG PXWDWLRQ WKDW ZDV DVVRFLDWHG ZLWK

HLWKHU '7\* RU WKH QXFOHRLVGH GUXJV WKDW ZHUH XVHG WRJHWKHU ZLWK '7\*

DV D SDUW RI WULSOH FRPELQDWLRQ WKHUDS\ 7KH RI SDWLHQWV LQ WKH

WULDOV ZKR GLG QRW UHVSROQG WR WKHUDS\ SRVVHVVG GHWHFWDEOH OHYHOV RI

YLUDO ORDG LQ SODVPD SHUKDSV IRU UHDVRQV RI QRQ DGKHUHQFH > @ EXW

GLG QRW KDUERU DQ\ GHWHFWDEOH GUXJ UHVLVWDQFH PXWDWLRQV \$OWKRXJK

WKLV VLWXDWLRQ LV VRPHZKDW VLPLodu WR WKH UDULW\ ZLWK ZKLFK UHVLVWDQFH

DJDLQVW ERRVWHG SURWHDVH LQKLELWRUV 3,V KDV EHHQ GHWHFWHG DIWHU

YLURORJLFDO IDLOXUH 9) LW LV DOVR WUXH WKLV KDV EHHQ SULPDULO\

LQYHVWLJDWHG IRU PXWDWLRQV LQ WKH YLUDO SURWHDVH 35 JHQH > @ DQG QRW

DW JDJ FOHDYDJH VLWHV ,Q DGGLWLRQ WKH 0 9 PXWDWLRQ DVVRFLDWHG ZLWK

UHVLVWDQFH WR 7& ZDV SUHVHQW LQ VRPH FDVHV RI IDLOXUH LQYROYLQJ

ERRVWHG 3,V EXW KDV QRW EHHQ GHWHFWHG LQ DQ\ FDVHV RI YLUDO UHERXQG

IROORZLQJ '7\* XVH LQ ILUVW OLQH WKHUDS\

'RHV /DFN RI )LWQHVV 3UHYHQW 3RWHQWLDOO\ 'WJ 5HVLVWDQW  
+LY IURP \*URZLQJ LQ 3DWLHQWV"

\$ K\SRWKHVLV WKDW KDV EHHQ DGYDQFHG WR H[SODLQ WKHVH ILQGLQJV LV  
WKDW YLUXVHV WKDW EHFRPH UHVLVWDQW WR '7\* PD\ EH VR UHSOLFDWLRQ  
LQFDSDLWDWHG DV WR QRW EH DEOH WR HIILFLHQWO\ JURZ WKXV VXFK YDULD  
PLJKW QRW EH GHWHFWDEOH LQ SDWLHQW SODVPD > @ )RU H[DPSOH LW LV  
NQRZQ WKDW '7\* VHOHFWV D PXWDWLRQ DW SRVLWLRQ 5 . LQ WKH LQWHJUDVH  
JHQH LQ WLVVXH FXOWXUH DQG LQ VRPH WUHDWPHQW H[SHULHQFHG SDWLHQWV  
WKDW WKLV PXWDWLRQ GPLQLVKHV WKH HQ]\PDWLF DFWLYLW\ RI WKH LQWHJUDVH  
HQ]\PH DV ZHOO DV YLUDO UHSOLFDWLRQ FDSDLFLW\ > @ ,QGHG VLPLodu UHVX  
WR WKH DERYH KDYH EHHQ REWDLQHG ZLWK WKH WZR RWKHU DSSURYHG LQWHJUDVH  
LQKLELWRUV 5\$/ DQG (9\* > @ +RZHYHU LQ WKRVH FDVHV WKH SUHVHQFH RI  
DQ LQLWLDO PXWDWLRQ ZDV RIWHQ TXLFNO\ IROORZHG E\ WKH DSSHUDUDQFH RI



&LWDWLRQEHUJ 0\$ 0HVSQGH 7  
7KHU GRL

,V 'UXJ 5HVLVWDQFH LQ )LUVW /LQH 7KHUDS\ DJDLQ

3DJH RI

SURYLGH LQIRUPDWLRQ RQ WKH FRQFH<sup>SRM</sup> RI WKH UHJDUW DQG DO2XW KHRU GQIWHUHQ  
LQWHJUDVH LQKLELWRUV LQ WKH FOLQLFDO DQDJDJHPHQW RI +,9 3RVLWLYH ,QG  
+RZ FRXOG WKLV K\SRWKHVLV EH WHVWHG" )LUVW D VVXG\ FRXOG EH  
FRQWPHPSODWHG LQ ZKLFK '7\* LV HPSORFRG DQDJDJHOW WR EH FRQVGLGHUHG IRL  
WUHDWPHQW QDLYH VXEMHFVW HYHQ WKRXJK SURSPHQW RJL DQG D VXEVHT  
ILUVW EH REWDLQHG LQ UHOHYDQW DQLPQ, PRGHOV DQG GHQHWHLURXVWVVKX  
VDOXWDUI WR FRQGXFW VVXGLHV LQ ZKLFK '7\* WRJHWKHU DQG DGGWLWLRQW  
VWXGLHG DV D WZR GUXJ UHJLPHQ LQ FRPSDULVRQ ZLWK UHJDUW DQG DUH JBLUVW  
157,V DQG WR VKRZ HTXLYDOHQFH EHWZHHQ WKH WZB DUPV RQWKHIDWV  
EHIRUH SURFHHGLQJ ,I WKH UHVXOWV REWDLQHQDULWWRK VHVH REV  
LQ WKH SKDVH ,,, FOLQLFDO WULDOW ZLWKLQDQW DQG D VXEVHT  
H[SODLQ WKH DEVHQFH RI UHVLVWDQFH LQ WKH WZB DUPV RQWKHIDWV  
REWDLQHG ,W JRHV ZLWKRXW VD\LQQ WKPW VVXFKWV  
DFFRPSDQLHG E\ LQWHQVH YLURORJLF PROQLWRQV DQG D VXEVHT  
WKDW VKRXOG LQFOXGH WKH XVH RWKHUDUDVHOV LWYH SDWLTXHOFQW  
LGHQWLILFDWLRQ RI '7\* UHVLVWDQFH PXWPLWIKDQW VWDQW  
SHULSKHUDO EORRG PRQRQXFQH DU FHOVXOYDQW LQ WKH WZB DUPV  
SODVPD VDPHOHV

+RZHYHU LW VKRXOG EH QRWHG WKDW FRRPQHFOLQILFDWDOWBROWG\ WLRQD RI WUHQH  
VLJQLILFDQFH RI WKH 5 . PXWDWLRQ KODQDQH DQG E\DRHEHGD UOJHGPHQW WKHQ D  
6\$,/,1\* FOLQLFDO WULDOW WKDW FRPSDUMHGFRQGD VHPXWBSWL DQD\WWRW5 '7\* IDQV SRVL  
WUHDWPHQW H[SHULHQFHG SDWLHQWV KZKVR HYDUGU XQIGHHQV JVRQHZ Q UMR LBRXVWB  
RI WKHLU WKHUDSHXWLF UHJLPHQV EXW KZKVRH KPDDQ DQG QHMR FHZKDM VRH  
ZLWK DQ LQWHJUDVH LQKLELWRU > @ ZL\\$1000 VRKHWKH .SDXVLDQWLRQ LQ WK@V VWXG\ EDVHOLQH SRVVHVVHG GUXJ UHVLVWDQFH PXWDWLRQV WKDW PLJKW KDYH  
FRPSURPLVHG WKH DQWLYLUDO DFWLYLUDQW DPUKOWLSOH \$59V LQ WKH UHJLPHQV  
WKDW WKH\ UHFHLYHG EXW WKH\ GLG QRW SRVVHVV LQWHJUDVH PXWDWLRQV  
EHFDXVH WKH\ KDG QRW UHFHLYHG DQ\ 7,6Y, DQWLPDQH RD\WLRQW  
VKRZHG WKDW '7\* ZDV VXSHULRU WR 5\$/QDWLRQV UHJDUW DQHWRQV  
WKHVH DQG WKDW WKH PRVW FRPPRQ UHJDUW DQHWRQV  
DSSHDUHG LQ RQ\ WZR SDWLHQWV LQ 9W K\\$P WKR D\WLRQV  
5 . ,Q FRQWUDVW IDLOXUH RQ WKH 5\$Q DQWLPDQH DQG DQWLPDQH  
DUUD\ RI 5\$/ DVVRFLDWHG PXWDWLRQV M\QV W\QWDFDQW  
ZKR UHFHLYHG '7\* DQG ZKR SRVVHVVH\QWDFDQW  
DSSDUHQWO\ FRQWLQXHG WR EH FOLQWDFDQW  
LQ UHJDUG WR PXWDWLRQV WKDW PD\ K\SRWKHVLV  
LQGLYLGXDOV 7KH GDWD WR GDWH VXPXWVWLRQD  
GLG QRW WDNH SODFH > @ +RZHYHU J\PSRQH DQHDFK  
UHVSROVLYHQHVV UHPDLQ XQDQVZHUHG  
WKHDS\ OHQGV FUHGQFH WR WKH K\SRV  
EH QRWHG WKDW IDLOXUH WR GHYHORS U  
:KDW DERXW 7UHDWPHQW )DLOXUH\ERXW RQ '7\* YLUDO ORDG LQ '7\* WUHDW  
+RZ FDQ ZH H[SODLQ WKH IDFW WKDW W\QWDFDQW  
UHFHLYHG '7\* LQ ILUVW OLQH WKHDS\ 2QH DQVZHU RI FRXUVH  
WKHDS\ 2QH DQVZHU RI FRXUVH L\WVWDFDQW  
EDUULHU WR UHVLVWDQFH RI DOO DQWLPDQH  
FRQVLVWHQW ZLWK WKH K\SRWKHVLV  
WU\LQJ WR DFFHVV FOLQLFDO VSHFLPHQV  
IURP FLUFXODWLQJ O\PSKRF\WHV DQG  
FRPSDUWPHQWV RI SDWLHQWV UHFHLYLQJ  
WKHG OLJKW RQ WKLV WRSLF 2I FRXUVH  
WKDW FRQWDLQ LQWHJUDVH UHVLVWDQFH  
SDWKZD\ PLJKW EH PRUH FRPPRQ WKDW  
GHIHFVLYH YLUXVHV PLJKW QRW HDVLO\ EH DFOH WR HHSOLEDWH  
PD\ FRPSOLFDW PDWWHUV WKH UHVXOWV  
PRQWKV

(DFK RI ODUN \$ :DLQEHUJ DQG 7KLEDXO  
LGHG IRU WKLV DUWLFOH DQG FRQWULEX  
DQG DSSURYHG WKH ILQDO PDQXVFULSW

5H1HUhQFHV

:DLQEHO\$J =DKDUDWRV \*- %UHQHQH%\* 'HYHORSPHQW RI  
DQWLHUHWURYLUDO GUXJ UHVLVWDQFH 1 (QJO - OHG