



WKDW VKRZV XS RQ DOO OLVWV > @ DOVR VKRZHG ZLGL  
GL



VDJUHHPHQW RI WKH LVGHLDUHQHHPKIQRW  
HPRWLRQ ZRUGV LQ RQO\ RIHFPOFSDUJLDJRHQ  
GLVHUHQWV XDJHV RSHQV XS D VHFRQG OHY  
DQ OLQJXLVWLF VWXGLHV VXJJHVW WKDW  
QXPEHU DQG QDPHV RI WKH EDVLF HPRWL  
GLVHUHQWV HPRWLRQ ZRUGV ZLOO RQO\ EH  
WR ODUJH DQ LVVXH WR EH GLVFXVVHG DW

UDFWLFHV IRUPLQJ DQG JUDGLQJ WHDPV RI LVWGHQW DV FROWUDVWLG ZLWK  
LQGLYLGXDO OVDGHQWV RQ WHDPV FDGRV FRSSHU DWLHY DQGWKHU HISDQGL  
MDQ MXVW LQGLYLGXDO LQHG OHDUQLQJ +RZHYHU WKHUH LV D SUREOHP WKYH  
UHIHUHQFHV WKDW , KDYH UHG \$OWKRXYLWV RQ ODUJH HPRWLWV  
FRSSHUWLRQ LQVWHDG RI FRPSHWLWLRQ EHWHZHQ VWXGHQWV VHPVXRYR EH  
DFWXDOO\ ZRUNLQJ WKHUH LV SUDFWLFDOO\ QR H[SODQDWRQ RI WKH HPRWLRQ  
SDUW PFK OHVV DQ\ HPSLULFDO HYLGHQFH RU HYHQ GHVFULSWLHY H[DPSOHV  
ORGHUQ VRFLHWLHV PRUH RU OHVV UHHP HPRWLRQV DV XQLPSRUWDQW DQG R  
GHVWUXFWLHY \$V D UHVXOW DV LQ WKH FRSSHUWLYH HGXFDFWLRQ SURMHFW  
HPRWLRQV DUH UHIHUHG WR DOO WKH UHPV UHTXLUH ERWK &21 & (376H) QDGLDZ  
GLVPLVVLYH

H HPRWLRQ ZRUOG

QIXVHG WKDW ZH KDUGO\ NQRZ ZKDW FHLHU ZRUGV JOREX XSWRQD P VHV W  
HPRWLRQ RI ORVV %XW WKHUH LV D ODUJ  
WKH DXWKRUV XVH WKH WHUP GLVWUHVV I  
DQG LPSOLHV FRQVFLRXVQHVV DQG SDLQ F

\*ULHQ WKLW FDVH DPELJXLW\ PLJKW VH  
ZHLHU ZRUGV JOREX XSWRQD P VHV W  
HPRWLRQ RI ORVV %XW WKHUH LV D ODUJ  
WKH DXWKRUV XVH WKH WHUP GLVWUHVV I  
DQG LPSOLHV FRQVFLRXVQHVV DQG SDLQ F  
)RU UHVVRQV WKDW KH GLGQDW PDNH FO  
XVH RI WKH ZRUGV GLVWUHVV YROXPHV W K  
VWXG\ WKH ZRUG LV XVHG IUHTXHQWO\ .  
+RZHYHU LQ 9 WKHUH LV D VKDUS FKDC  
WDNHQ E\ JULHI

,Q WKUHH YROXPHV LW LV IDLUO\ FOH  
FRQHFV GLVWUHVV WR ORVV DQG FU\LG  
FRQQHFWRQ XVLQJ RQO\ WKH ZRUG JULH

NQRZ WKHUH KDV EHHQ QR SXEOLVKHG UHVSQRVH WR WKLW GUDPDWLF FKDQJH L  
QRPHQFODWXUH

H RULJLQDO VWXGLHV RI IDFLDO H[SUHVVLRQ RI HPRWLRQ IROORZHG  
7RPSN\LOWW DJH QHLWKHU > @ UHIHUHG WR JULHI +RZHYHU ODWHU  
ZRUNV VXFK DV > @ UHIHU RQO\ WR JULHI QHYHU WR GLVWUHVV DOVR UHIHUV  
WR JULHI 2WKHUV XVH WKH ZRUG VDGQHVV UDWKHU WKDQ GLVWUHVV RU JULHI  
DQRWKHU GLUHFWLRQ LV IROORZHG E\ > @ WKH\ HOLGH DURXQG ERWK JULHI DQ  
GLVWUHVV E\ UHIHUULQJ RQO\ WR IDLOXUH WR PRXUQ ,W ZRXOG VHHP WKDW  
DQDUFK\ UXOHV LQ WKH QDPLQJ RI WKH HPRWLRQ DVVRFLDWHG ZLWK ORVV DQG  
FU\LQJ

)H DU DQ[LHWU H )UHXG IH DU PHDQW WKH HPRWLRQDO VLJQDO RI  
SK\VLFD GDQJHU WR OLIH RU GLPHVLDQG DQ[LHW\ ZDV MXVW D PRUH  
RI IHDDV\UMXG WKH PHDQLQJ RI WKHVH ZRUGV EHJDQ WR H[SDQG  
\$Q[LHW\ EHFDPH EURDGHU HQRXG\WR RHLQFOXGH PDQ\ NLQGV RI  
HPRWLRQ EXW QRW DV EURDG DV I HPRWLRQDO DURXVDO g &XUHQW YHUQDFXO  
XVDJH LV VR HQODUJHG WKDW IH DU FDQ EH XVHG WR PDVN RWKHU HPRWLRQV

1DPH	6WLPXOXV	3UHSDUDWLRQ )RU	9LVLEOH &XHV
*ULHI	/RVV	3*RRG' &U\ 6REELQJ DQG WH	5JMFHQW ZRUN VXJJHVVV
)H DU	3K\VLFD O GDQJHU	6KDNLQJ DQG VZHDWLQJ	WKDW WKH ILUVW WKUHH K
\$QJHU	)UXVWUDWLRQ	%RG\ +HDW	XQLYHUVDO ERGLO\ FXHV
3ULGH	)HHOLQJ DFFHSWHG	1R SUHSDUDWLRQ WKH QRUP	DUO QWDLWL\
6KDPH +XPLO (PEDUUDVVPH	HWOLQJ UHMHFWHG	3*RRG' ODXJK	+LGLQJ EHKDYLRU
1R QDPH	3K\VLFD O VWUHV DQG	LZOOHVZLWK WHDUV	/LWWOH VWXGLHG

**7DEOH PRWLRQDO PRGHV**

LVWDEOH SURSRVHV WKDW IHDU LV D UHVSQVH WR SK\VLFD O GDQJHU DQG WKDW LW LQYROYHV ERGLO\ SUHSDUDWLRQ WR VKDNH DQG VZHDW \$QJHU LV

&LWDW16R0HII 7 \$Q (PRWLRQ 3UREOHP LQ &RRSHUDWLYH GRIFDWLRQ - &KLOG \$GROHV

3DJH RI

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6LJPXQG ) ,QWURGXFWRU\8QZLWXUHV 9ROXPH \$OOHQ -DFRedV 5RRP +RJDUWK /R  
7RZDUHQLOLDVLF (PRWLRQV 4XDOLWDWLYH ,QTXLU\