

,]PZ ^ Z}}o d Z œ• Wœ}Pœ u

.IE]ZZI[GIG]kghI +Y<EIZI[j d<OI

Ä

/jkGI[j EjQpQjQIh d<OI

Ä

0QZI]ZZQjZI[j d<OI

Ä

Gp<[EIG .IfkQgIZI[jh d<OI

Ä

!<jlgQ<Yh <[G fkQdZI[j d<OI

Ä

/kZZ<jQpl hhlhhZI[jh d<OI

ö

1[Qj +Y<[qQjP lhh][h <[G YQ[XIG gIh]kgEIh <[G <hhQO[ZI[jh d<OIh

<EXOG]k[G [N]gZ<jQ][•

"I r j I [I g < j Q] [/ j < [G < g G h •

Gp<[EIG +gld<g<jQ][h•

]dQIh]N kdY]<GIG G]EkZI[jh j]][YQ[I dY<jN]gZ

+kgEP<hQ[O hkddYQIh dgQ]g j] k[Qj

!<jlgQ<Yh <[G fkQdZI[j•

IY YIEjg]dP]gIhQh Qj qQjP Gslh ¥dQdlj]Ih• jQdh• EP<ZDIg• EI[jgQNkOI• p]Yj<OI <G<djlG• hj<Q

[_Y\]\]G 0sdQ\[O <D /QZkY<jQ\]\[slh](#)

[_Y\]ÿ \]gZ](#)

+PI[]YdPjP<YIQ[

[_IZ\] +_ +I\[](#)

/kZZ<jQpl hhlhhZI[jh•

Ej]kj jPI ZZk[l /shjIZ

kj]QZZk[Qjs +g]WIEj

[jQDQ]jQE .IhQhj<[EI

"Iq 0PIg<dQIh Q[<[EIg 0gl<jZI[j +g]WIEj

kj]QZZk[Qjs +g]WIEj

1[QjZZk[]Y]Os• IPQ[G jPI /EI[Ih
.IhI<gEP +g]WIEj•

]pQG 6QGI]•
Q]Y]Os]N]pQG

É IEjkg]g] <[G <ddYQE QhE]plgs]N +I[QEYY
7]gZh <[G <qOI <E]l
g]hd][h]h +I[QEYYQ] QhE]plgs

]jQDQ]iQEh <[G
.]hQh] <[E]

Ê /]g]d]E]EEkh +[I]Z][Q<
IEjkg]• [jg] <[G <dd\ /k[YY]gOs> YY]gOs 0g
YY]gOs ZZk[l .]hd][kQYQG[O 0]Y]g<[E]
YY]gOQ]h 6QGI] .l<G/k[YY]gOs

]g]] kh] <[
d]h]kdd]g]]]
Q] hP]EX <[G
D<hQE]Z]gO
]g] <jZ]h] ¥+!
1) +.!

+g<E]QE<Y Q[+<gj]lgh•]Z
hE] <gQ]h Q[]Z]gO] [Es hQ]k

Ë [jg] j] 6<EEQ[lh> rd]E Qh]gs]N 6<EEQ[lh
.]hd]E] <j <YY jQZ]h
.]g]g]d]g] pQGI]d]g] 6

.]h] <gEP• [g][jYQ[] \$kjDg] <
0]h]Q]O <[G]EkZ]j<gs
/]kGs 6Qgkh] !<sD] []j GkgQ[C
d<[G]ZQE

[j]gd]g] <jQ][]N]pQG 6<EE
.]h] <gEP

Ï .l<G <[G QhEkhh <h
Ip]Y]dZ]j<Y ZZk[]Y]
<[G qPs Qj EP<[O]h];

6<EEQ[l hhQO[Z]j]

ÏÏ 6QGI]•]QZZk[Qjs
<g]l]gh Q[] <Y]PE<g]l
Q[j]g]h]h]N E<g]l]g]l

kj]QZZk[l Qh] <h] +g]W]E]j
<g]l]g 0]P]j E<g]l]g NQ]h s]k

ÏÏÏ]P[]dXQ[h 6QGI]•XQ]
Q]Z]GQE<Y [OQ[]]gQ]

.]h]kgE]h
Q]j]EP .]Y]h qQ]P]kj <[<Gp

l<g[Q[O <D]kj Z]g] hd]EQN<
E<g]l]gh]k]E<jQ][<Y g]fkQ]g]Z
GG]G jPQ]h g]h]kgE] <h]P
Q[Y]l<g[Q[O Z]g] <D]kj <p<
j]sd] E<g]l]gh

Q[<Y GQhEkhhQ][<[G g]NY

Ihh][Â !<jlgQ<Yh <[G]EkZI[jh

*ORZ *HUP DQG 2XWEUHDN \$FWLYLW\

ODWHULDOV *ORZ *HUP 3RZGHU DQG RU ORWLRQ DQG 89 OLJKWV VPDOO RQHV DUH LG

ODQXDO

,QVWUXFWLRQV

: ,WK SRZGHU KDYH VWXGHQWV FRXJK RU VQHH]H ZLWK D VPDOO DPRXQW RI JORZ JHU
D +DYH 89 OLJKWV RQ DQG DOO RWKHUV RII DQG REVHUYH WKH GLVWDQFH RI WKH
,I XVLQJ WKH ORWLRQ ZDVK KDQGV FRPSOHWHO\ DSSO\ ORWLRQ DQG WKHQ XVH 89
D 'LVFXVV WKH LGHD RI FRPPHQVDO EDFWHULD DV ZHOO
E 2SWLRQDO YLGLFURFHGRPDNDQG %DFWHULD

'HWHUPLQH WKH 5RRW RI WKH 2XWEUHDN

ODWHULDOV

1D2+ DQ\ VDIH PRODULW\

:DWHU

&XSV

3KHQ\ODODQLQH

,QVWUXFWLRQV

/DEHO WKH FXSV ZLWK QXPEHUV RQH IRU HDFK VWXGHQW
3XW ZDWHU LQ DOO FXSV H[FHSW DQG PDNH QRWH RI WKDW VWXGHQW FXS QXPEHU
\$VN VWXGHQWV WR H[FKDQJH IOXLG E\ SRXULQJ LQ DQG RXW RI WKH FXS LQWR DQRW
\$IWHU FRPSOHWH FRPH WR WKH LQVWUXFWRU WR UHFHLYH GURSV RI SKHQ\ODODQ
,I WKH OLTXLG WXUQV SLQN WKDW VLPXODWHV WKDW SHUVRQ LV LQIHFWHG
+DYH WKH FODVV ILJXUH RXW ZKR ZDV WKH URRW RI WKH RXWEUHDN E\ FROODERUDW

8QGHUGRJ 6FLHQWLVW \$ZDUG

\$V LQ PDQ\ DVSHFWV RI OLIH SUHMXGLFH KDV H[LVWHG DQG RFFXUUHG WR PDQ\ ZLWKLQ V
FUHGLWHG WR RWKHUV VRPH ZRPHQ RU SHRSOH ZLWK GLIIHUHQW OHYHOV RI LQFRPH RU
LPSURYHG RYHU WKH \HDUV EXW LQ %LRWHFK WKH PDMRULW\ RI WKRVH LQ WKRVH UROHY

\$VVLJQPHQW

&KRRVH D VFLHQWLVW WKDW PDGH D JUHDW FRQWULEXWLRQ WR VFLHQFH WKDW ZDV DQ X
GLVFRYHU\ WKDW \RX WKLQN GHVHUYHV PRUH UHFRJQLWLRQ 3UHVHQW WKLV FRQWULEXW
KDG WR RYHUFRPH LQ RUGHU WR JHW UHFRJQLJHG RU GLVFXVV D VFLHQWLVW WKDW ZDV
LPPXQRORJ\ RU ELRWHFKQRORJ\

6LJQ XS LQ DGYDQFH VR VFLHQWLVWV DUH QRW UHSHDWHG

([DPSOH 6FLHQWLVW HLQWLVW WQHU

/HVVRQ 0DWHULDOV DQG 'RFXPHQWV

<Ej]gh jP<j [NYki[EI jPI ZZk[I /shjIZ

!<XI < O]]OYI G]EkZI[j]g dglhI[j<jQ][N]g jPQh <hhQO[ZI[j• s]k Zkhj P<pl <j YI<hj N]kg pQhk<Yh
]N jPI j]dQEh DIY]q qQjP <YY DkYYIjh Q[EYkGIG• N jPIgl Qh <[]jPIg j]dQE]N Q[jlgIhj• NIIY N

I[IjQEh

ÿ]q <[G qPs G] OI[IjQEh Q[NYki[EI]kg QZZk[I hshjIZ<
ÿ Qhj NQpl plgs E]ZZ][GQh]gGIgh jP<j s]k <gl []j D]g[qQjP jP<j <gl YQXIYs j] DI E<ggQIG
ÿ Qpl jq] Ir<ZdYIh]N OI[Ih jP<j E<khl < GQh]gGIg <[G P]q jP<j]EEkgh•
ÿ Qpl jq] Ir<ZdYIh]N OI[Ih jP<j Z<XI < GQh]gGIg QYY[Ihh Z]gl YQXIYs <[G P]q Qj Qh]NjI[j

"k]gQjQ][

ÿ]q G]Ih [k]gQjQ][Q[NYki[EI]kg QZZk[I hshjIZ<
R Qhj <j YI<hj É jPQ[Oh jP<j DI[INQj]kg QZZk[I hshjIZ <[G P]q
R Qhj jPgII [k]gQjQ][<Y <hdIEjh jP<j E<[DI < GIjgQZI[j j]]kg QZZk[I hshjIZ
ÿ Qpl < E<hl hjkGs]N P]q h]ZI][I q<h Ird]hIG j] <[QYY[Ihh ¥E<[DI <[sjPQ[OI <[G qP<j PIYd
ÿ IhEgQDI P]q hj<sQ[O PsGg<jIG hkdd]gjh jPI QZZk[I hshjIZ

rIlgEQhI

ÿ]q G]Ih IrlgEQhI d]hQjQpIYs QZd<Ej jPI QZZk[I hshjIZ<
R I GIj<QYIG <D]kj qP<j P<ddl[h qQjP jPI YsZdP NYkQG GkgQ[O IrlgEQhI
ÿ QhEkhh P]q jPgII GQNNIgl[j jsdlh]N IrlgEQhI QZd<Ej]kg QZZk[I hshjIZ GQNNIgl[jYs ¥jPIg
ÿ IhEgQDI P]q j]] ZkEP IrlgEQhI E<[DI GIjgQZI[j<Y j] jPI QZZk[I hshjIZ
ÿ 7P<j jsdlh]N QZZk[I EIYYh <gl Z]gl]g YIhh E]ZZ][

/jglhhÿ dPshQE<Y]g IZ]jQ][<Yÿ dQEX][I

ÿ]q G]Ih hjglhh QZd<Ej s]kg QZZk[I hshjIZ<
ÿ IhEgQDI <j YI<hj NQpl P]gZ][Ih]g [Ikg]jg<[hZQjIgh jP<j <gl glY<jIG j] jPI QZZk[I glhd][hI
ÿ 7P<j QZZk[I EIYYh <gl Z]hj INNIEjIG Ds jPIhI EP<[OIh Q[P]gZ][Ih• <[G qPs G]Ih jP<j]EEk

/YIId

ÿ]q G]Ih hYIId QZd<Ej s]kg QZZk[I hshjIZ<

ÿ IhEgQDI <j Yl<hj NQpl P]gZ][Ih]g [Ikg]jg<[hZQjjlgh jP<j <gl glY<jIG j] jPI QZZk[I glhd][hl
ÿ]q G] jPIs jlhj jPQh Q[< Y<D]g<j]gs hljjQ[O< 7P<j Qh Zl<hkgIG <[G OQpl <[Ir<ZdYl]N jP

OQ[O <[G jPI ZZk[I /shjIZ

ÿ QhEkhh qP<j QZd<Ejh jPI QZZk[I hshjIZ Q[GIplY]dZI[j•

ÿ N s]k qlgl < G]Ej]g OQpQ[O glE]ZZI[G<jQ][h <h j] E][jQ[kQ[O j] E<gl N]g < PI<YjPs Q[N<[j

ÿ \$plg jQZI• qP<j EP<[OIh <D]kj]kg QZZk[I hshjIZ j] Z<XI Qj Ylhh <EjQpl<

ÿ 7P<j <gl h]ZI E][GQjQ][h]g hjgkOOYlh qQjP jPI QZZk[I hshjIZ jP<j IYGIgYs Q[GQpQGk<Yh
Yl<hj jPgll Ir<ZdYlh•

lhh][Ä !<jlgQ<Yh <[G]EkZI[jh

%ORRG 7\SLQJ /DE \$ /HVVRQ LQ 0HQGHOLDQ *HQHWLFV 1DPH

%DFNJURXQG 1RWHV

" \$17,*(16 ±
" \$17,%2',(6 ±
" ± .DUO /DQGVWHLQHU
" ±

7KHUH DUH DOOHOHV RU JHQHV IRU EORRG W\SH

6LQFH ZH LQKHULW JHQHV IRU EORRG W\SH RQH IURP HDFK SDUHQW WKHUH DUH SRVV

" \$ DQG % DUH GRPLQDQW
" 2 LV UHFHVVLVLYH
" 7\SH \$ FDQ EH \$\$ \$2
" 7\SH % FDQ EH %% %2
" 7\SH \$% KDV D JHQRW\SH RI \$%
" 7\SH 2 KDV D JHQRW\SH RI 22

%ORRG 7\SH &HOO 'LDJUDF \$QWLJHQV 6X

3DUW \$ \$QVZHU WKH IROORZLQJ TXHVWLRQV EDVHG RQ WKH UHVXOWV IURP WKH ODE

| %ORRG 7\SH | \$QWL \$ \$QWLERGLHV 5HVXOWV | \$QWL % \$QWLERGLHV 5HVXOWV | \$QWL 5K \$QWLERG\ 5 |
|------------|---------------------------------|--------------------------------|----------------------|
| \$ | | | |
| \$ | | | |
| % | | | |
| % | | | |
| \$ % | | | |
| \$ % | | | |
| 2 | | | |
| 2 | | | |

| 6DPSOH | \$QWL \$ 5HVXC | \$QWL % 5HVXC | \$QWL 5K 5HVX | %ORRG 7\SH | RI SRSXODW 6<: |
|-------------------------|----------------|---------------|---------------|------------|-------------------|
| 6XVSHFW \OH 0RQGHOR | | | | | |
| 6XVSHFW -: *UHWVN\ | | | | | |
| 6XVSHFW /DUU\ *UHWVN | | | | | |
| 6XVSHFW 0LWFK :LOVRC | | | | | |
| &ULPH 6FHQH | | | | | |

| | | | | | |
|--------|--|--|--|--|--|
| 9LFWLP | | | | | |
|--------|--|--|--|--|--|

:KDW EORRG W\SH ZDV IRXQG DW WKH FULPH VFHQH" ([SODLQ KRZ \RX FDPH WR WKLV FR

'RHV WKH EORRG W\SH IURP WKH FULPH VFHQH PDWFK DQ\ RI WKH VXVSHFWV RU WKH YLF

8VLQJ WKH SHUFHQWDJHV EHZRZ FDOFXODWH WKH SHUFHQWDJHV RI LQGLYLGXDOV WKD
 DERYH KRZ \RXU ZRUN LQ WKH VSDFH SURYLGHG

| 7\SH | RI 3RSXODWLRQ | 7\SH | RI 3RSXODWLRQ |
|------|---------------|------|---------------|
| \$ | | 5K | |
| % | | 5K | |
| \$% | | | |
| 2 | | | |

\$ [

3DUW % 'HILQH WKH IROORZLQJ LPSRUWDQW WHUPV

\$QWLJHQ ±

\$QWLERG\ ±

\$JJOXWLQDWLRQ ±

3DUW & \$QVZHU WKH IROORZLQJ XVLQJ D GLIIHUHQW IRQW FRORU

| | |
|----------|----------|
| 4XHVWLRQ | 5HVSRQVH |
|----------|----------|

| | | | |
|--------|----------|--------|---------|
| 7\SH 2 | 7\SH \$% | 7\SH % | 7\SH \$ |
| | | | |

,GHQWLI\ ZKLFK DQWLERGLHV HDFK RI WKH IROORZLQJ ZRXOG SURGXFH

| | | | |
|--------|----------|--------|---------|
| 7\SH 2 | 7\SH \$% | 7\SH % | 7\SH \$ |
| | | | |

3DUW '

\$ ZRPDQ KDV FRQWDFWHG DQ DWWRUQH\ FODLPLQJ WKDW D FHUWDLQ PDQ LV WKH IDWKHU RI KHU F
RZQ IDWKHU LV W\SH 2 7KH EDE\ LV W\SH \$% 7KH PDQ SURYLGHV D VDP SOH RI KLV EORRG ZKLFK
3XQQHWW 6TXDUH SURYLGHG VKRZ DQG H[SODLQ ZKHWKHU LW LV SRVVLEOH IRU KLP WR EH WKH ID

| | | |
|--|--|--|
| | | |
| | | |
| | | |

ORP 7\SH \$
*UDQGSD 7\SH 2
%DE\
ODQ 7\SH %

/HVVRQ 0DWHULDOV DQG 'RFXPHQWV

\$FW RXW WKH ,PPXQH 6\ VWHP

,Q JURXSV WKDW \RX ILQG DSSURSULDWH KDYH VWXGHQWV PDNH D PLQXWH VNLW DV W
IROORZLQJ DGGUHVHVG

3DWKRJHQ

1DWXUDO .LOOHU &HOOV

0DFURSKDJHV

% &HOOV

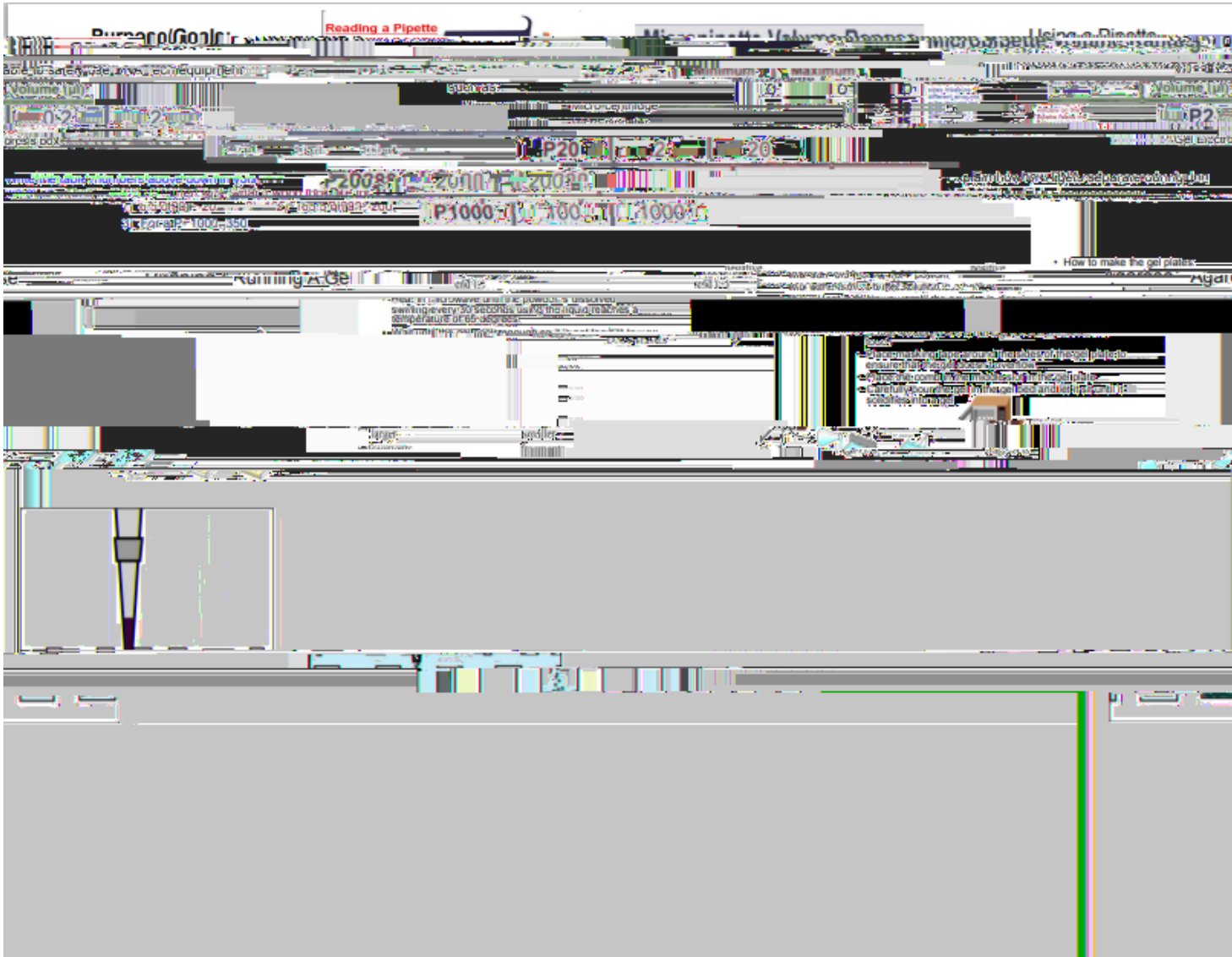
7 &HOOV

\$QWLERGLHV

6XSSUHVVRU 7 &HOOV

/HVVRQ 0DWHULDOV DQG 'RFXPHQWV

7KLV LV OLQNHG LQ D JRRJOH SUHVHQDWLRQ EXW HDFK LPDJH EHORZ LV D QHZ VOLGH



9LGHR /LQN

!khEkY<g shjg]dPs

7<jEP jPQh G]EkZI[j<gs•

!khEkY<g shjg]dPs 6QGI]• 0PQh pQGI] hP]qh < g<gl <[G N<QgYs k[X[]q[GQh]gGIg jP<j Qh plgs

'XFKHQQH ZLWK D)XWXUH 7KH 3RZHU WR /LYH

ÆÊ ZQ[kj]h

\$UH <RX ,QQRFHQW"

1DPHBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB
'DWHBBBBBBBBBBBBBBBBBBBBBBBBBBBB3HUBBBBBBBB

*R WR

/RRNLQJ DW WKH JHO SURYLGHG

:KR LV LPSOLFDWHG E\ WKH '1\$ UHVXOWV"BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB

:K\ LV WKH YLFWLP¶V '1\$ LQFOXGHG"BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB

:K\ LV WKH RIILFHU¶V '1\$ LQFOXGHG"BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB

<[Elg gjQEYI .lhl<gEP

[GQpQGk<YYs• dYI<hl gl<G Â <gjQEYI jP<j Qh glYQ<DYI][< j]dQE]N s]kg EP]QEI]N <[Qhkl
lp<Yk<jIG <h < d]l[jQ<Y khl qQjPQ[jPI Y<hj jPgll sl<gh• Njlg gl<GQ[O• qgQjl jq] j] jPgll d<g<
hkgll j] EQjl s]kg h]kgEI Q[+ •

.lE]ZZI[GIG h]kgElh ¥QN s]k [IIG QGI<h!•

/EQI[El <QYs

"lq 9]gX 0QZlh ¥P<h h]ZI O]]G• <ddYQIG hEQI[El!

Ihh][É !<jlgQ<Yh <[G]EkZI[jh

\$QWLELRWLF 5HVLVWDQFH \$VVLJQPHQW

\$QWLELRWLF UHVLVWDQFH LV LQFUHDVLQJ GXH WR PDQ\ IDFWRUV 'HVFULEH WKH IROORZ

7KH WZR GLIIHUHQW FDWHJRULHV RI DQWLELRWLFV DQG KRZ WKH\ ZRUN)HHO IUHH V

)LQG D VWDWLWLF VKRZLQJ WKH XVH RI RQH W\SH RI DQWLELRWLF LQ D \HDU

:KDW DUH DQWLELRWLFV XVHG WR WUHDW"

'HVFULEH KRZ PLFUREHV DUH EHLQJ UHVLVWDQW WR DQWLELRWLFV

/HVVRQ 0DWHULDOV DQG 'RFXPHQWV

5HVHDUFK \$QLPDO 7HVWLQJ WR 6WXG\ 9LUXVHV LQ WKH /DE

\$QLPDOV DUH XVHG WR DGYDQFH VWXGLHV LQ PHGLFLQH 5HJDUGOHVV RI \RXU YLHZV RQ
GRJV RU KDPVWHUV KDYH EHHQ XVHG WR DGYDQFH WKH NQRZOHGJH RI D WUHDWPHQW

,QFOXGH WKH IROORZLQJ

:KDW ZDV WKH WUHDWPHQW"

+RZ ZDV WKH VWXG\ SHUIRUPHG DQG ZKDW ZHUH WKH VXEMHFWV"

:KDW ZHUH WKH UHVXOWV"

+RZ GLG WKLV SURJUHVV WR KXPDQ WULDOV"

:KDW LV RQH VXUSULVLQJ WKLQJ \RX OHDUQHG IURP \RXU UHVHDUFK"

&LWH \RXU UHIHUFHV LQ \$3\$ IRUPDW

:HHN 0DWHULDOV DQG 'RFXPHQWV

9DFFLQH \$VV LJQPHQW

5HVHDUFK WKUHH GLIIHUHQW W\SHV RI YDFFLQHV DQG KRZ WKH\ ZRUN

,QFOXGH WKH GLVHDVH LW WDUJHWV

+RZ LW ZRUNV

7KH HIILFDF\

7KH SHUFHQW RI WKH SRSXODWLRQ WKDW UHFHLYHV LW

:KHQ LW LV DGPLQLVWHUHG

,I ERRVWHUV DUH QHHGHG

'SZMH :E GGMV MKRQIRX

6IEH SRI SJ XLI EVXMGPIW JVSQ XLI 2I[=SVO 8MQIW ERH HIWGVMFI LS[XLI-~~ZEGGMRI~~ [S[VOW]SXS WLSZ
ERXMKIR ERXMFSH] ZMVYW WTM~~DI~~ TWISTEIR X~~S~~ 2M WGY P WGE R M S Q EPP KVSYTW ERH XS XLI GPEWW

3IL]H~~U~~X~~T~~W [[[R]XMQIW GSQ MRXIVEGXMZI LIEPXL T»^IV FMSRXIGL GSZMH ZEGGMRI LXQP

.SLRWSR~~SLRWSR~~SRXTW [[[R]XMQIW GSQ MRXIVEGXMZI LIEPXL NSLRWSR NSLRWSR GSZMH ZEGGM

1SHIVRE~~LE~~X~~T~~W [[[R]XMQIW GSQ MRXIVEGXMZI LIEPXL QSHIVRE GSZMH ZEGGMRI LXQP

<s ÂÃ !<jlgQ<Yh <[G]EkZI[jh

kj]QZZk[l Qh]gGlg +g]WIEj

/IYIEj <[Qhkh>GQh]gGlg>]g GQhI<hl]N jPI QZZk[l hshjZ•

+YI<hl Q[EYkGI jPI N]YY]qQ[O•

" <ZI]N jPI GQhI<hl>E][GQjQ][qQjP < DgQIN GIhEgQdjQ][Ÿ Å

"]q G]lh <[Q[GQpQGk<Y Olj Qj<Ÿ Å

" 7P<j <gl jPI GIZ]Og<dPQEH]N jPQh GQh]gGlg< ¥ Qpl dlgeI[j<Olh <h qIYY <h hQO[QNQE<[j Dgl<XG]q[]N <Olh>

" Qhj jPI hsZdj]ZhŸ Å

"]q Qh Qj GQ<O[]hIG< I hdIEQNQEŸ <[G Q[EYkGI QZ<Olh]N qP<j E]kYG DI hII[¥hkEP <h jPI pQhk<Yh 'pl khIG
[IEIhh<gs•Ÿ Å

" 0gl<jZI[jhŸ Ç

R kggI[j]djQ][h

R IhEgQDI <[s [lq glhl<gEP N]g jgl<jZI[jh QN <ddYQE<DYI

R [EYkGI glE]ZZI[GIG GQIj glE]ZZI[G<jQ][h

" IhEgQDI <YY jPI hshjZ]h <[G P]q jPIs <gl <NNIEjIG•

" Qpl < hj]gs]N h]ZI][l'h E<hl qQjP jPQh GQh]gGlgŸ Å

" Qjl h]kgElh Q[+ N]gZ<j ¥<j YI<hj Å!Ÿ Å

" !khj P<pl <j YI<hj Å pQhk<YhŸ Å

" +glhl[j<jQ][Qh jP]g]kOP <[G]gO<[QvIGŸ Å

0]j<Y ›ÂÃ›ÂÞ ›ÂÃ I<EP

" +glhl[j<jQ][Qh jP]g]kOP <[G]gO<[QvIGŸ Å

0]j<Y ›ÂÃ›ÂÞ ›ÂÃ I<EP

7]gXh QjIG

0PI <EEQGI[j jP<j EP<[OIG jPI q]gYG Ÿ dl[QEQYYQ[•¥[•G•!• .ljgQlPlG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z Pjjdh•››qqq•s]kjkDI•E]Z›q<jEP<
g]EXYIPkghj• /• ¥ĀĀĀĀ•ZdġQP]ĀĀQhE]plgIG jPI NQghj E]g][<pQgkh• "lqh• .ljgQlPlG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z Pjjdh•››qqq•DD
<[qI EkgI 6 qQjP <[Q[WIEjQ][• g• •<Ÿ]ŸOklDlġ ¥ĀĀĀĀ• r<[kjjġs ĀĀ!• .ljgQlPlG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z Pjjdh•››s]kjk•DI›ĀQĀ
]g][<pQgkh• lhh][h Ng]Z d<hj IdQGIZĀEh• 9] u`

P<[E<GIZs\$[E]G]h ¥pQGI]! œ OI[I E][jg]Y• P<[E<GIZs• .ljgQlplG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z Pjjdh•>>qqq•XP<[<E<GIZs•]gO›j
P<[E<GIZs0s[IG]N QZZk[I glhd][hlh• [[<jl<[G <G<djQpl• PkZ]g<Y ph• EIYYŸZIGQ<jlG ¥pQGI]!• P<[E<GIZs• .ljgQlplG IDgk
Pjjdh•>>qqq•XP<[<E<GIZs•]gO›hEQI[EI›PQOPŸhEP]]YŸDQ]Y]Os›PhŸPkZ<[ŸD]GsŸhshjIZ›PhŸjPIŸQZZk[IŸhshjIZ›p›jsdlhŸ]NŸQZZ
P<[E<GIZs6GjK+h• ¥pQGI]!• P<[E<GIZs• .ljgQlplG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z Pjjdh•>>qqq•XP<[<E<GIZs•]gO›hEQI[EI›DQ]Y]Os
P<[E<GIZs7PjQh• <YYlgOQE gPQ[QjQh< ¥pQGI]!• P<[E<GIZs• .ljgQlplG IDgk<gs ĀĀ• ĀĀĀĀ• Ng]Z
Pjjdh•>>qqq•XP<[<E<GIZs•]gO›hEQI[EI›Q[ŸQ[ŸEY<hhŸĀĀŸDQ]Y]OsŸQ[GG<›rEÁÊIGÊÉNĚ<ÊIÇÈĀD•Q[ŸQ[ŸPkZ<[ŸPI<YjPŸ<[GŸGQ
ŸgPQ[QjQh
• • 0QZlh• [jg]GkEjQ][j] jPI /EQI[EI IPQ[G]g][<pQgkhlh• +<gj ŸgQjZ<Qj]B• Cp PjgQlplG . ll Dgk<gs bĀĀP<ĀĀĀĀ• (Ng]Z 0bP°Àp`@p0

