

\$ 3URSRVHG (DUO\ 'LDJQRWVLFH7DHWHW%RUH\$GOJRK
(PSOR\LQJDQ \$UWLILFLDO 1HXUDO 1HWZRUN (

/HQQDUW *XVWDIVVRQ

'HSDUWPHQW RI &RPSXWHU 6FLHQFH (OHFWULFDO DQG 6SDFH (QJLQHHULQJ /XOHN 8QLYHUVLW\ RI 7HFK
 &RUUHVSQRQGLQU D\K\Q\B\UW *XVWDIVVRQ 'HSDUWPHQW RI &RPSXWHU 6FLHQFH (OHFWULFDO DQG 6SDFH
 (PDLO OHQQDUW JXVWDIVVRQ#DVVRFLDWHG OWX VH
 5HFHLHYGD\ 0DQXVF1URS3/2 (GLWIRUVLJQHGD\ 3UH4& 182 34 5HYLHZHG0D\ 4& 1R
 '32 5HYLVHGD\ 0DQXVFULSW1R '32XEOLVKH\Q '2,
 &LWDWXWRUDIVVRQ \$3URSRVHGD\JQR7HWMSIGRIUKHLPILHUH1D% BIVRGSLPXDMPISFOORYLQJ

.H\ZRUG\$O]KHLPHU•V GLV

H Q G H D Y R U V K D V E H H Q F R Q V L G G H X U D R P O R H U
H O H F W U R Q L F V \ V W H P V S L R Q H H U H G E \ O H

, QWURGXFWLRQ

\$VVRFLDWLYH PHPRULHV DUH D VXEVHV

, Q D UHFHQW SDSHU LW ZDV UHSRUW FHOJFJXKWP WRH %HWXOJF HSU REJH FJW WQH W
IUDJPHQWHG FXHV FRQVLVWLQJ RI 'ZHO @ HMRQVRVNL GJDKWH @ HJWZFRUQNDP FDPH YPRBHU I
WUDFHV' XVHG LQ WHVWV IRU SDWWHUQDS FQPHS @ HRWLRQ JZHUPD JH RGXQVGH FMRL REA DQ
VHQVLWLYH PDUNHU RI DJH UHODWHG FKRQJLHWGLYQ VKHL RLUWVQ DQR H+RGSJH GQVKQH
%HWXOD SURMHFW KDV 3RQH RI WKH ORQJH FWSRQWVWLQJ ORQSEWVXQ LQSH BQWDXW
QHXURFRJQLWLYH IXQFWLRQ' > @ DQG WKH VDPH GLPHQVLRQ 7KH +RSILH

QHXRURKUQWEWHTXQTLWERQ > @ EXW
7KH DELOLW\ WR FRPSOHWH SDWWHUQV ZLWK GLVWRUWHG FXHV LV UHODWHG WR DJH UHODWHG HSLVRGLF P
GHILFLWV > @ 2QH RI WKH FKDUDFWHULW\ VFKHRH \$01KAWHUHVWGWKPDUVHRSV
HSLVRGLF PHPRU\ GHILFLWV DQG WKH UHODWHG WR PRU\ PXORDUHVFWKHQSURJUHVVL
FRPSOHWLHQ LV UHOHYDQW IRU WKH GLDQHORQHOLWMLPMUDS&HWHDWH HOLP
QHWRZBUNSV RELOLW\ WR HUEFHOLW\ VWPH

\$O]KHLPHU\|V GLVHDVH ILUVW GLD JQR & HFSDB \S3YH\BHAIXO GHPJUDQWL RFO W K H
*HUPDQ SV\FKLDWULVW \$ORLV \$O]KHLPHU FRO QHF WL LWH POGHFLQW-WPAWL QLQDWH C
QHXURORJLFDO GLVHDVH WKDW SUHVHQW QWV KDLQ Q RWKFXUH POGQ\HPEGFRPMW RUVDW
FDQ PRGHUDWH V\PSWRPV RI WKH GLVHDVH DLUH DWPG ODEOH DQ @ WKHVH SDSHUW LW

7KH E H J L Q Q L Q J R I W K H G L V H D V H P S70 9 T Q G H L W Q D R W H Y W X S75 B T W K I F M G M V H V P W D T E W L V K W K
*H U H > .2(8 R)-102.2(8 8 P S O H W H)-10 V \.2(8 R W K V 2(8 R D K R 2 Q 8 R U F V)W O L W D R W H K H S(8 R V B Q W H -F O .
G L V H D V H > @

(IIRUWV DW PDWKHPDWLFDO PRGHOOLQJ RI QHXURQV DQG WKHLU FRQQHFWLR
E\ V\QDSVHV DV QHWZRUVN VWDUWHG DV HDUO\ E\ 0F&XOORFK DQG 3LWWV
QHXURQ PRGHO > @ LQVSLUHG E\ GLJLWDO FLUFXLWU\ 7KH SURJUHVV RI VXFF

QXPEHUV LW LV MXVW D PDWWHU RI D MXGLFLRXV FKRLFH RI SUHVHQWHG SDWWI
7KLV OHDGV XS WR WKH K\SRWKHVLV WKDW D VLPLODU FKRLFH RI SDWWHUQV VK
WR KXPDQV FRXOG PDNH HDUO\ GLDJQRVLV RI \$O]KHLPHU\ GLVHDVH
SRVVLEOH

ODWHULD OV D Q G O H W K R G V

,Q)LJXUH ZH VKRZ ILYH SDWWHUQV RU ORJRV E\ WKH 6ZHGLVK DUWLVW
7H[%HUJ LQ WKH XSSHU URZ 7KHVH ORJRV GHVFULEHG E\ HOHPHQW

