极化不仅意味着对信息的选择性曝露（选择特定的Content）也意味着对身份归属的追求（选择与自己相类的观众）

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Media audience homophily: Partisan websites, audience identity and polarization processes

Shira Dvir-Gvirsman
Tel Aviv University, Israel

Abstract

The study suggests that media consumers favor certain websites not only due to their content but also due to their audience. A new concept is introduced: "audience homophily," which describes one's preference for partisan media websites catering to a homogeneous, likeminded consumership. This attraction is explained in terms of the need for self-consistency, and I suggest that over time such behavior will polarize political identity through a spiral of reinforcement. Based on both a survey-experiment ($N = 300$) and a panel study combined with web-tracking technology that recorded online-exposure behavior ($N = 397$), it was found that individuals with more extreme ideology present higher levels of audience homophily and that, longitudinally, audience homophily is somewhat associated with ideological polarization, intolerance, and accessibility of political self-definition.

Keywords

Homophily, network analysis, partisan media, reinforcing-spiral model, selective exposure

Today's digital media market offers an almost endless variety of political websites. This change, among others, has reignited scholarly interest in selective exposure: that is, individuals' preference for likeminded political outlets (e.g. Holbert et al., 2010). Until now,

Corresponding author:
Shira Dvir-Gvirsman, Department of Communication, Tel Aviv University, PO Box 39040, Tel Aviv 699780, Israel.
Email: shirad@tau.post.ac.il

research on selective exposure has mainly been concerned with audience choice of media outlets due to their partisan content (Knobloch-Westerwick, 2014). Deviating from this tradition, the current study focuses on another characteristic of websites: namely, the homogeneity level of their respective audiences. In this, it continues work arguing that media choices are not only a matter of information, but are also very much about social identity and self-definition (Liu, 2007; Papacharissi, 2013). Just as viewing the website of one's favorite band may serve as an indication of one's cultural taste and identity, choosing outlets that are frequented by partisan audiences could be a way to establish belonging to a political group.

This study introduces a new concept, "media-audience homophily," referring to the extent to which an individual prefers partisan media websites catering to a homogeneous, likeminded consumership. The first part of this article delineates the concept of audience homophily in the context of the existing work on online homophily and online media selection. Next, the article explores the origin and influences of behaviors conducive and consequent to this phenomenon: I suggest here that, like cases of other types of political homophily (Ikeda and Richey, 2009; Levitan and Visser, 2009; Stroud, 2010), individuals holding more extreme ideologies will show higher levels of audience homophily. This, in turn, promotes polarization and reduced tolerance of others.

Two complementary studies were conducted: a panel study and a survey-experiment. First, a sample of 400 people was tracked for a period of 7 weeks leading up to and 1 week following the 2013 Israeli general elections. Data were obtained in two ways: via pre- and post-election surveys which probed participants' political opinions, and via web-tracking technology which recorded online-exposure behavior. The analytical approach adopted here capitalizes on the combination of behavioral data and network analysis, rarely seen in the research landscape (Webster and Ksiazek, 2012), to explain longitudinal change in political attitudes (Levitan and Visser, 2009; Webster and Ksiazek, 2012). Next, to account for the fact that in real life likeminded partisan websites attract likeminded audiences, thus rendering it impossible to distinguish between the two explanations, a survey-experiment was conducted ($N = 300$).

Defining media audience homophily

According to Abercrombie and Longhurst (1998), the proliferation of media in postmodern society accustomed us to the habitual role of being audiences and performing for an imagined audience. The rise of the "networked society"—and in particular social network sites—has proven the continuing relevance of their idea (Litt, 2012; Marwick, 2011). Current research implements this general idea in the arena of online news consumption, arguing that being accustomed to the constant presence of "audience," we take "audience" into account when choosing media.

Prior work demonstrated that audience is a vivid concept in people's minds when online. For instance, Light and Wakeman (2001) showed that users construct a mental representation of websites' audiences which they reflect on while browsing. More so, work on news branding showed that people can describe the character of different news stations' audiences (McDowell, 2004). The present work goes one step further, suggesting that people not only have a notion with regard to a media outlet's audience but that

they prefer (to a certain degree) outlets which cater to a likeminded audience—a behavior termed here media audience homophily.

比较受众同质化和选择性曝露

Audience homophily is closely related to another explanation for media choice: selective exposure. Selective exposure mostly accounts for media preferences in terms of media content—people prefer content supporting their attitudes (Knobloch-Westerwick, 2014; Knobloch-Westerwick and Meng, 2011; Stroud, 2010). Audience homophily, in contrast, emphasizes the level of website-audience homogeneity, which is an additional characteristic of websites. Undoubtedly, the two are related, yet not identical. First, while partisan media content is typically cast as either liberal or conservative, their audiences' level of homogeny varies to a greater degree (Gentzkow and Shapiro, 2011). For example, CNN and the *New York Times* are both considered liberal outlets; however, the 40% of the audience of the former are conservatives, while the audience of the latter only 20% (Flaxman et al., 2013). Second, media content is probably one heuristic people use to deduce audience identity, but not the only one. In the online context, users' comments, likes, shares, and other social cues are also available. Therefore, I claim that audience identity is an additional layer guiding media choice; and as will be described next, the reasons that audience guides media choice differ from the reasons that content does so.

Why do people care about audience identity? Predicting audience homophily

The claim that audience identity can serve as an appealing factor stems from two established ideas: that group identity plays a role in our media choices (Knobloch-Westerwick and Hastall, 2010; Stroud et al., 2014) and that media selection is an act of self-reinforcing. Knobloch-Westerwick (2014) and Slater (2007) argue that individuals strive to maintain, distinguish, and even reinforce their identities through their selection of media outlets, thus achieving self-consistency. Likewise, group-identity theory depicts selective exposure as a self-enhancing act, achieved by consuming positive messages about one's group (Knobloch-Westerwick and Hastall, 2010). Continuing this scholarly line, I maintain that selective exposure and audience homophily are two facets of the need for consistency. Possibly, individuals choose outlets catering to partisan audiences as a way of establishing and reinforcing their belonging to a political group. Using media outlets with homogeneous audiences sends a clear message regarding one's political identity, both to oneself and to others, as opposed to accessing outlets targeting a more diverse consumership. In this sense, audience homophily is essentially a matter of online political taste, just as such concepts as online "taste communities" or "taste performance" are reflections of cultural taste (Baym, 2011; Bourdieu, 1984; Gans, 1999; Papacharissi, 2013; Peterson, 1992). In the online environment, selection of objects—whether cultural or political groups, websites, and so on—represents one's taste and signals one's social identity to others (Papacharissi, 2013). Moreover, as Liu (2007) argues in regard to the online landscape, "cultural consumption not only 'echoes' but also actively 'reinforces' who one can be" (p. 252). Hence, choosing an outlet with a homogeneous audience sends a clear message with regard to the political "tested community" one wishes to belong to.

从audience identity引申至audience homophily

If an individual's media choices are an act of self-reinforcement, then one's political group identity should guide one's *political* media preferences (Greene, 2004). Strength of political identity is often gauged by level of ideological extremity (Greene, 2004), given that the latter marks a more accessible and more entrenched "political self." Indeed, in the current academic discussion with regard to partisan media, political extremity is one factor which looms especially large (Stroud, 2010; Taber and Lodge, 2006). Hence, Hypothesis 1:

H1. Ideological extremity will be positively associated with audience homophily.

Influences of audience homophily: polarization, accessibility, and intolerance

As mentioned above, audience homophily may eventually have a self-reinforcing effect (Slater, 2007). That is, the reasons drawing one to partisan media in the first place—homogeneous content and homogeneous audiences—now continue to influence and further strengthen one's political self. Previous scholarship on attitude-consistent content described reinforcing spirals as sources of political intolerance, polarization, and a more salient, accessible political self (Mutz, 2002; Stroud, 2010; Stroud and Muddiman, 2013; Tesser et al., 1995). In much the same way, audience homophily is also expected to elicit self-reinforcing processes.

When one is embedded in an online environment that boosts one's political self, this specific aspect of one's self-identity is activated, becoming more dominant than others (Knobloch-Westerwick and Meng, 2011; Slater, 2007). In a recursive process, such activation may over time result in a more salient and more accessible political self, as well as in a more extreme ideological self-definition (Huckfeldt et al., 1999; Ikeda and Richey, 2009; Slater, 2007). Hence, Hypothesis 2:

H2a. Over time, higher levels of audience homophily increase the accessibility of one's political self.

H2b. Over time, higher levels of audience homophily increase one's ideological extremity.

Likewise, activating one's political self might foster intolerance since this process accentuates differences between opposite political groups instead of blending them (Ikeda and Richey, 2009). When one's political social identity becomes salient and accessible, it colors the way one interprets social reality—becoming a prism through which people look at the world (Arpan et al., 2007). Put differently, we become more focused on tensions and disagreements between our own and the rival political camp, instead of searching for the middle ground, or at least acknowledging the other side (Ikeda and Richey, 2009; Iyengar et al., 2012). Hence, the following hypothesis:

H2c. Over time, higher levels of audience homophily increase one's political intolerance.

Study 1: the 2013 Israeli general election

Method

The analysis presented below is based on a combination of two datasets. The first comes from a two-wave panel survey conducted around the 2013 Israel national election among a sample of Israeli Jewish voters. The pre-election wave of data collection took place 7 weeks prior to election day (23–25 December 2012), and the post-election wave began 1 day after election day (27–31 January 2013).1 Survey data supplied information on factors predicting audience homophily and afforded the opportunity to gauge changes in tolerance and ideological extremity throughout the election period.

The second dataset contained records of actual web browsing: I logged online behavior of the same sample for the period of 7 weeks, from the day on which the first survey was conducted up to and including election day. To track web browsing behavior, I used a computer program which the participants installed of their own volition on their computers. The program recorded complete URLs and the exact time at which the URL was opened. The program did not record traffic from secure sites (all https websites). Web browsing supplied information regarding individuals' level of homophily as well as more general material about online exposure to political content: its extent as well as the level of selective exposure and of crosscutting exposure.

Sample

All the data for the current study were collected by *Panels*, a survey company specializing in Internet-based research. *Panels* recruits its large pool of respondents via sponsored links on Google, Facebook, and other popular websites. Respondents are asked to take part in periodic surveys in exchange for incentives (gift certificates). The entire pool comprises more than 40,000 participants, and an average panelist answers 1.2 surveys per month (no minimum is required).

Panels tailors a sample according to the study's aims. For this study, a random sample of 900 panelists was created, representative of the adult Jewish Israeli population with regard to age, gender, and geographic stratification. During the first wave of data collection, all of the participants received an email notice with a link to the survey. Of the 900 original invitees, 453 completed the survey. The demographics of the participants roughly matched the census figures for age (in years, $M=44.4$, standard deviation [SD] = 16.9), income (on a 5-point scale, the encoding category was the average monthly income in Israel as published by the Bureau of Statistics: 8325 NIS, $M=2.6$, $SD=1.3$), and education (on a 6-point scale, where 1 stands for elementary school and 6 stands for MA or PhD, 46% held an academic degree, which matches the Organisation for Economic Co-operation and Development [OECD] data reports for Israel [OECD, 2014]). However, the group had an overrepresentation of women (56% females, as compared to 52% in the general population). In the second wave of data collection, we recorded a 12% attrition rate ($N=397$). Attrition was associated with holding more right-wing attitudes ($t_{(450)}=-2.9$, $p<.01$); in all other variables, no differences were detected between resampled and non-resampled participants.

Survey measurements

Dependent variable

Extremity of political leaning. Respondents were asked to place themselves on a continuum ranging from 1 for extremely left-wing to 7 for extremely right-wing ($M=3.5$, $SD=1.3$). Political leaning was recoded to indicate ideological extremity by means of folding, that is, the mid-score of the political leaning scale represented the low-end of the extremity scale, while the two ends represent the high-end. In this folded version, one's political extremity could range from 1 to 4, with higher scores reflecting more extreme ideology (first wave: $M=2.1$, $SD=0.91$; second wave: $M=2.0$, $SD=0.91$).

Tolerance. This was measured using three questions, all on a scale of 1 to 4 (Peffley et al., 2001). Participants were asked about their willingness to allow (a) extremists to serve as anchormen and presenters on TV, (b) demonstrations in which the Israeli flag was burned in the vicinity of their homes, and (c) people with unpopular political opinions expressing them publicly with impunity (first wave: $M=2.2$, $SD=0.54$; second wave: $M=2.3$, $SD=0.54$).

Response latency. Attitude accessibility, that is, how quickly an attitude is activated from memory, is traditionally measured by response latency (the time interval between stimulus onset and the individual's response, Fazio, 1995). The amount of time it took a respondent to place him/herself on a left–right scale mentioned above was measured in seconds. Response time ranged between 2.3 and 51.1 seconds in the first wave ($M=9.6$, $SD=5.8$), and between 2.1 and 56.3 seconds in the second wave ($M=11.7$, $SD=7.2$).

Covariates. The models reported below control for education, income, gender, age, and religiosity (response categories varied from 1 for "secular" to 4 for "ultraorthodox"). *Frequency of political discussions* in general ($M=2.9$, $SD=1.1$) and *frequency of political discussions with people holding different political opinions* ($M=2.9$, $SD=1.2$) were measured using one item for each, on a 5-point scale.

Self-reports of exposure to offline news. Respondents were asked to what extent they were exposed to a list of outlets, including newspapers, TV, and radio. Response categories varied from 1 for "not exposed at all" to 5 for "exposed regularly" (nine items; radio: $M=2.0$, $SD=0.71$; print: $M=2.1$, $SD=0.63$; TV: $M=4.0$, $SD=1.2$).

Political orientation. To determine homophilic and heterophilic exposure, participants' political orientation was gauged based on self-report. As mentioned above, respondents were asked to place themselves on a scale ranging from 1 (*extreme right*) to 7 (*extreme left*) (49% of respondents—right; 22%—left). The political orientation of 125 participants placing themselves at the middle of the scale was further investigated using other attitudinal indices measured in the survey. All participants were asked about their attitudes regarding four different issues which stood at the center of the election campaign, and clearly separated left from right: social welfare, Israeli–Palestinian negotiations, a possible attack on Iran's nuclear installations, and relations between the secular and the ultra-Orthodox sectors. Each issue was tapped into using two items.2 An overall scale for

left–right attitude tendency was created based on the average of these eight items. Based on this score, the 125 participants were sorted so that 37% of them were left-wing, 57% were right-wing, and 6% were centrists. The latter 6% (8 participants) were not included in the analysis. For the remaining of the sample, the score was not taken into account.

Web-tracking data-coding procedure. During the period sampled, 15,976 websites were visited by 402 participants. The political orientation of the websites was determined through a coding process (regardless of the political affiliation of its audience), in line with other studies on political selective exposure. Thus, a given website was deemed liberal not because the majority of its readers were from the left, but rather because it published content upholding leftist ideology. Hence, the data gathered afforded a distinction between two characteristics of websites: the political orientation of their content, on the one hand, and of their audience, on the other.

Coding procedures for political content of websites are described in detail in Online Appendix B (also see Dvir Gvirsman et al, 2014). Two research assistants coded the inter sample of websites, first determining whether a website contains political information. News sites, current affairs, the websites of political parties and politicians, and petition websites all fall under our definition of political issues. In addition, each YouTube video was coded to determine its content. Using the same principles, videos addressing the election or any other political information were coded as political content. Political websites accounted for 15% of all the traffic documented. The political websites were coded as leaning to the left, leaning to the right, or as having no clear ideological leaning. A reliability check of 80 websites yielded a Krippendorff's alpha of .81.

After the ideological affiliation of the political websites was determined, I calculated scores for each participant with regard to the following parameters: total volume of web browsing (total number of URLs visited, $M=1645$, $SD=2045$), total number of political URLs visited ($M=175$, $SD=332$), and percentage of partisan URLs from total political URLs, subdivided into likeminded ($M=6\%$, $SD=0.19$) and crosscutting exposure ($M=2\%$, $SD=0.02$), based on each participant's political orientation as specified above. These measures tap into likeminded content exposure, thus allowing me to control in my analysis for the traditional explanation of selective exposure.

Audience homophily score using network analysis. Because there are no data available on website-audience political identity in the Israeli online market (for the United States, see Gentzkow and Shapiro, 2011), I chose to carry out a network analysis (using UCINET) (Webster and Ksiazek, 2012). Network analysis offers acceptable measures of homophily which tap into the idea of audience homophily because they assess links between likeminded users based on their media consumption.

Using participants' web-tracking data, I created a network in which each participant is a node (or actor), characterized by its political orientation.3 The nodes are linked based on media preference (see Figure 1). That is, if two participants entered the same website they were linked; they both had to visit it at least twice.

Next, an E-I score was calculated for each participant (Eveland and Kleinman, 2013). E-I is based on the ratio between heterophilic links (with members of out-group, i.e. people holding opposite ideology) and homophilic links (with members of in-group, people holding same ideology). For example, for a person holding right-wing ideology,

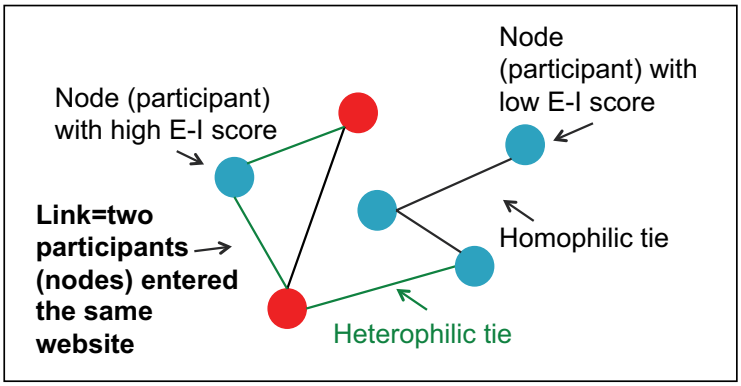

Figure 1. Measuring level of homophily for participant affiliation; red represents left-wing user.

a link with another person from the right is considered homophilic and a link with someone from the left is considered heterophilic. E-I scores range from −1 (*all links are with members of in-group*) to +1 (*all links are with members of out-group, M*=−0.07, *SD*=0.31) (Eveland and Kleinman, 2013).

Further analysis was conducted to assure that homophily is not the function of exposure to one specific website (for instance, exposure to a single, very homogeneous website or avoidance of a highly heterogeneous website). Likewise, data were probed to check whether websites coded as having a partisan leaning draw a smaller, more homogeneous audience. Indeed, websites that were coded as central did attract more *users* in comparison to partisan websites ($F_{(2,51)}=4.4, p<.05$). However, there was no significant difference in the *volume* of traffic to these websites (total URLs, $F_{(2,51)}=1.8, p=.18$). To test the difference in audience, I calculated the "conservative share" indicator, which gauges the percentage of URLs accounted for by right-wing users (Gentzkow and Shapiro, 2011). Here a significant difference was detected between right-wing websites on the one hand and central and left-wing websites on the other ($F_{(2,51)}=6.0, p<.01$; contrast test—right vs. center: $t=2.5, p<.05$; right vs. left: $t=3.3, p<.01$). No significant difference was found between center and left-wing websites ($t=-1.5, p=.13$). Thus, partisan websites do appear to cater to smaller, more homogeneous groups.

Additional data were collected to validate the measurement developed here, as well as to demonstrate that users do hold a perception regarding the political identity of the audience of a given website (McDowell, 2004). In the survey carried out on a different representative sample of adult Jewish Israeli Internet users, participants were asked to rate ideological tendency of a series of "objects," among them the audience of websites included in Study 1; they could also opt to respond "don't know." Only 22% chose this response at any stage, on an average of 1.5 websites—that is, 78% positively identified audience tendencies on every single media outlet represented in the survey. The mean estimation of audience identity was correlated with actual website audience as measured in Study 1 ($r=.87, p<.05$).

Statistical analysis

Predicting homophily. When analyzing a node attribute, such as participants' E-I scores, one cannot rely on linear regression since nodes are not mutually independent but are

Table 1. Regression predicting audience homophily level.

	Unstandardized coefficient	Standardized coefficient
Gender	0.02	0.04
Education	−0.02	−0.09
Religiosity	−0.01	−0.03
Age	0.01	0.04
Ideological leaning	0.13	0.56**
Ideological extremity	−0.05	−0.15*
Total web browsing	0.00	0.04
Political discussions	−0.01	−0.03
Political discussions with different minded	0.02	0.08
Constant	−0.24	0.00
Adj. R^2	0.55	

Results were obtained using vector regression for node attributes.
*$p < .05$; **$p < .01$.

part of a network (Borgatti and Cross, 2003). UCINET offers a regression model similar to ordinary least squares (OLS) regression which corrects for this dependency. This technique was employed to probe which demographic and political covariates (i.e. political leaning, extremity, discussions) are associated with participants' homophily scores.

Predicting extremity, tolerance, and response latency. In the next stage of the analysis, an OLS regression was used to predict the effects of audience homophily. This technique is appropriate because a node attribute is used as a predictor extracted from the network. A panel design enables a test for *change* in political extremity, political tolerance, and latency by including initial levels of these three factors. The analysis controlled for all covariates listed above.

Results

Predicting homophily (H1)

To predict homophily, a vector regression was implemented, using UCINET. This model predicts a node attribute—in this case E-I score—while correcting for dependency. Of all predictors, only two were found significant: ideological extremity and right-wing political orientation (see Table 1). As expected, extremists showed lower E-I scores. Likewise, proponents of right-wing ideology had lower E-I scores in comparison to their counterparts from the left.

Extremity, intolerance, and latency (H2)

An OLS regression was conducted to establish the influence of homophily by predicting the post-election dependent variables based on E-I score, control variables, and the

Table 2. OLS regression predicting change in tolerance, response latency, and ideological extremity.

	Tolerance T2		Response latency T2		Ideological extremity T2	
	B	SE	*B*	SE	*B*	SE
Gender	−0.03	0.06	0.13	0.64	−0.09	0.10
Education	0.04	0.03	−0.64**	0.25	−0.01	0.04
Religiosity	−0.03	0.04	0.12	0.38	0.12*	0.06
Age	0.02	0.03	0.65**	0.28	−0.06	0.04
Ideological extremity T1	0.00	0.04	−0.97**	0.39	0.59**	0.06
Tolerance T1	0.42**	0.05				
Response latency T1			0.28**	0.04	0.00	0.01
E-I score	0.29+	0.17	2.87+	1.66	−0.50*	0.25
Ideological leaning	0.00	0.04	−0.56	0.37	0.09	0.06
Exposure to news online	0.00	0.00	0.00	0.00	0.00	0.00
Likeminded exposure online	−0.08	0.19	0.28	2.01	0.04	0.29
Crosscutting exposure online	−0.26	1.04	4.60	10.52	−1.08	1.59
Total web browsing	0.00	0.00	0.00	0.00	0.00	0.00
Radio	−0.03	0.06	−0.08	0.60	0.00	0.09
Print	0.03	0.07	−0.28	0.68	0.05	0.10
TV	−0.01	0.03	0.07	0.32	0.04	0.05
Political discussions	0.01	0.04	0.32	0.43	−0.04	0.08
Political discussions with different minded	0.01	0.04	−0.33	0.39	−0.04	0.06
Constant	1.14**	0.32	9.93**	3.03	0.53	0.47
Adj. R^2	0.24		0.21		0.40	

OLS: ordinary least squares; SE: standard error.
T1 measures were obtained during the 7 weeks preceding election day. T2 measures were obtained 1 day after election day.
$^{+}p < .10$; $^{*}p < .05$; $^{**}p < .01$.

dependent variables as measured pre-election. Thus, the model used here predicted longitudinal change. As can be seen in Table 2, over time E-I score was associated with less extreme ideology, suggesting that audience homophily did produce polarization. As for response latency and tolerance, here the longitudinal association was only close to significance, albeit in the direction hypothesized: audience homophily promoted intolerance and increased accessibility. These results were obtained after controlling for the effect of ideological extremity and of sheer exposure to likeminded outlets—that is, after the traditional measures for selective exposure were accounted for.

Study 2: experimental design

Although the analysis controlled for indicators of content-selective exposure, in a non-experimental setting the identity of a website's audience and its content are often entangled. As was demonstrated by the results above, partisan media outlets engage likeminded audiences. Thus, while Study 1 offers high external validity, the purpose of Study 2 was

to establish causality by means of a survey-experiment. The manipulation aimed at testing whether or not website-audience identity guides an individual's media choice above and beyond content. Three experimental conditions were devised. The first condition, which serves as the baseline, presented participants with information about content alone. The other two conditions presented information about both content and audience identity: in one of these conditions, the political orientation of content and of website's audience aligned, while in the other condition they did not. It is expected that website audience will influence participant choice as follows:

H1a. When audience and content are congruent with one's ideology, the likelihood of choosing congruent content will be greater in comparison to baseline.

H1b. When audience congruency and content congruency do not align, the likelihood of choosing congruent content will be smaller in comparison to baseline.

As for the effects of audience homophily, as suggested above, a self-reinforcement process is expected:

H2. When audience and content are congruent with one's ideology, extremity and accessibility will be greater in comparison to baseline.

It is unclear what the effects of the juxtaposing condition with regard to self-reinforcement will be, given the lack of scholarly work in this field. Thus, we have the following:

RQ1. Are there differences in extremity and accessibility when audience congruency and content congruency do not align, in comparison to baseline?

Method

Participants. Participants were individuals with a clear political ideology, because only with such individuals is it possible to determine congruence with a particular audience or content. Using the same online platform (*Panels*), 1100 randomly selected panelists were asked to testify about their political ideology using a scale ranging from 1 (*right*) to 9 (*left*). A total of 1 week after the administration of this screening question, 150 of those reported as holding right-wing ideology (scores between 1 and 3, out of 227) and 150 holding left-wing ideology (scores between 7 and 9, out of 154) were invited to take part in the experiment. The average age was 48 ($SD = 10.6$), 51% held an academic degree, and 37% were females (income, on a scale of 1 to 5: $M = 3.0$, $SD = 1.3$).

Procedure and manipulation. Participants were randomly assigned to one of three experimental conditions.4 In each condition, participants were asked to choose between two options, which varied according to the experimental condition. In all conditions, the political affiliation of writer/audience was specified and, to avoid confounding, no mention was made of a specific website or writer name.

All groups received the same introduction:

> We are interested in how people choose what to read. We would like to ask you to choose one of two articles to read now.
>
> Then the various options were presented.
>
> In the content-only condition:
>
> Choose (a) an article presenting arguments supporting a left-wing attitude [or] (b) an article presenting arguments supporting right-wing attitude.
>
> In the content and audience condition:
>
> Choose (a) an article presenting arguments supporting a left-wing attitude published in a site that has a majority left-wing audience [or] (b) an article presenting arguments supporting a right-wing attitude published in a site that has a majority right-wing audience.
>
> In the content versus audience condition:
>
> Choose (a) an article presenting arguments supporting a left-wing attitude published in a site that has a majority right-wing audience, [or] (b) an article presenting arguments supporting right-wing attitude published in a site that has a majority left-wing audience.

Participants then received an op-ed text presenting an opinion according to the political slant of their choice (left or right). The articles used were published in one of Israel's leading news sites, and prior to the experiment were evaluated to ensure they did not differ in strength and persuasiveness.5 After reading this text, participants were asked to report their political leaning using the same self-placement scale as was employed in the screening question. In addition, response latency was measured as per Study 1. Participants were also asked to assess their own level of political extremity in comparison to the Israeli public. This perceived extremity scale ranged from 1 (*more moderate in comparison to the Israeli public*) to 7 (*more extreme in comparison to the Israeli public*).

Statistical analysis. The purpose of the analysis was twofold: first, to identify differences among conditions in the likelihood of selecting attitude-congruent content (using analysis of variance [ANOVA]). Second, to test for differences in political extremity by using both participants' response latency as well as their answers on the self-placement ideology scale (recoded to measure ideological extremity, as per Study 1) and perceived extremity scale. In the case of response latency, the analysis also controlled for response time as measured in the screening question 1 week prior to the experiment.6

Results

Media choice

The differences among the groups are significant ($F_{(2,298)}=3.7$, $p<.05$) and in the direction expected (as per H1a and H1b). Participants were more likely to select congruent

content when informed that both content and audience were congruent (85%), in comparison to the condition in which they did not receive information about audience (78%, contrast tests: $t_{(298)}=2.10$, $p<.05$). Likewise, the chances of selecting congruent content plunged when informed that the content was published in a website that enjoys a different-minded audience (61%, $t_{(298)}=2.56$, $p<.05$).

Effects of audience homophily

Figure 2 presents the descriptive statistics of all measures indicating extremity. As can be seen, no significant differences are evident with regard to the answers to the self-placement scale ($F_{(2,295)}=0.45$, $p=.63$). In the case of perceived extremity, a significant difference emerged ($F_{(2,295)}=3.36$, $p<.05$): participants who did not receive any information about audience perceived themselves as less extreme in comparison to those in the audience and content condition ($t=2.1$, $p<.05$; supporting H2).

As for response latency, here no main effects were found ($F_{(2,295)}=0.56$, $p=.54$), yet a significant interaction with selection was evident (selection: $F_{(1,295)}=0.17$, $p=.68$; interaction: $F_{(2,295)}=3.3$, $p<.05$). Among those who chose consistent content, there were significant differences between participants in the juxtaposed condition and the two other conditions (conditions 1 and 3: $t=3.9$, $p<.05$; conditions 2 and 3: $t=6.0$, $p<.05$), whereby participants who chose congruent content which was published in an incongruent website took longer to respond. In contrast to expectation, participants in the audience and content condition did not present shorter response latency when compared to the baseline condition. However, while in the baseline condition there was no significant difference in response latency between those selecting congruent and incongruent content ($t=0.09$, $p=.77$), in the audience and content condition such a difference did emerge ($t=3.4$, $p<.05$). Participants who chose incongruent content which came from an incongruent website took longer to respond.

To conclude, while the hypothesis regarding media selection was confirmed, the hypothesis regarding polarization found only partial support. Audience identity did influence preference, regardless of the political slant of the content. In addition, there is some evidence that audience identity influences perceived extremity and salience of political identity (i.e. response latency). With regard to the latter, the most prominent effect is the decreased salience among those who had to choose between congruent content and audience.

Discussion

This article set out to augment current literature on online political selectivity and homophily by developing a new concept termed "audience homophily." While research has hitherto focused mostly on the content of partisan outlets, audience homophily is concerned with the audiences of these media sources. To the extent that partisan media consumption is guided by a quest for self-consistency (Knobloch-Westerwick, 2014; Slater, 2007), I suggested that this need can be met not only through likeminded content but also by being part of a homogeneous audience. Thus a broader theorization is required, whereby content figures as only one piece of the puzzle. Users assign importance to a spectrum of features characterizing a media outlet, among them the affinity of its content and of its audience.

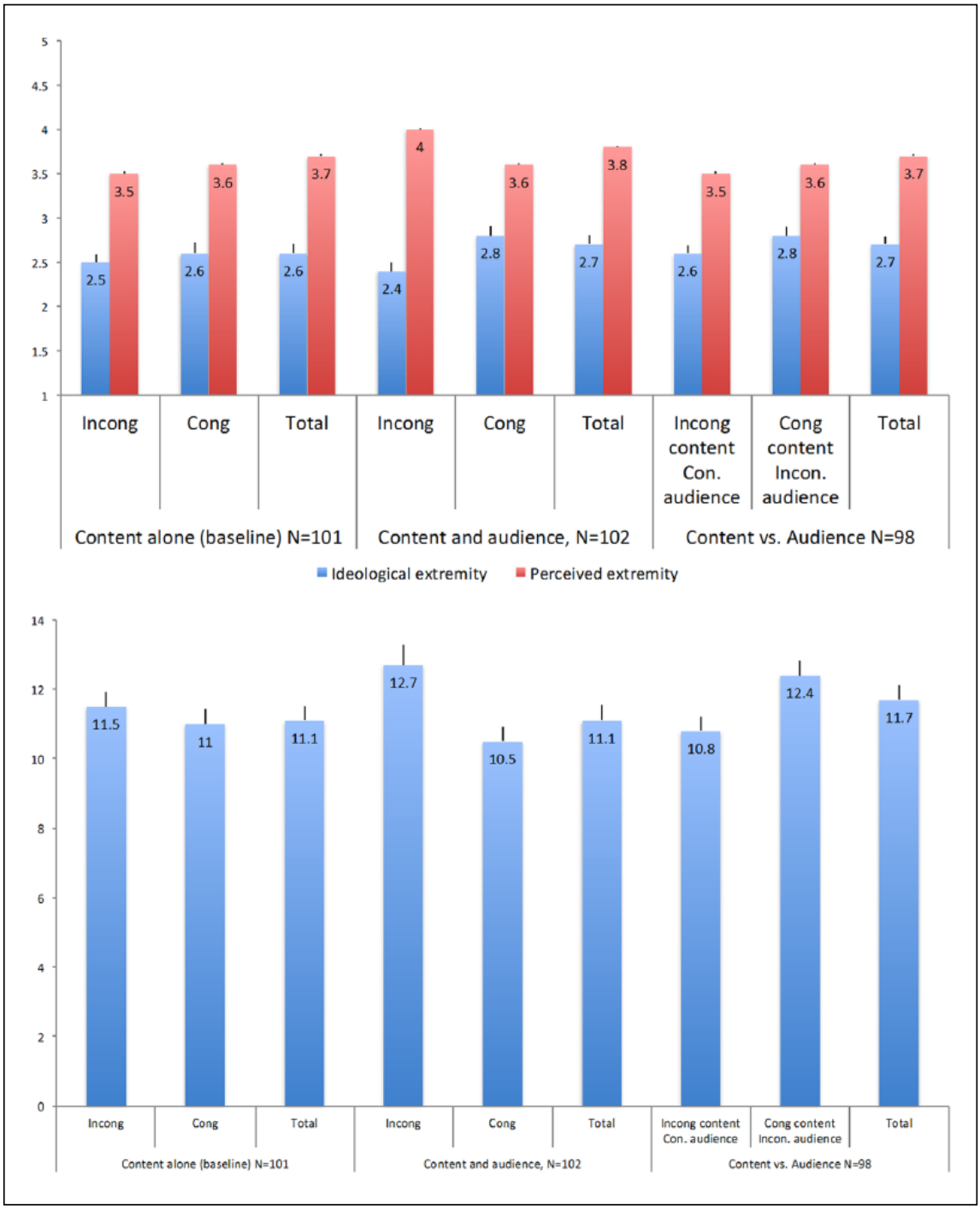

Figure 2. Mean and standard errors of political extremity (boom half), response latency (upper half) according to experimental condition. Ideological extremity, measured on a 1 (*moderate*) to 5 (*extreme*) scale, perceived extremity measured on a 1 (*moderate*) to 7 (*extreme*) scale; response.

The results obtained here dovetail with those of previous work depicting media influence as a reinforcing spiral (Slater, 2007): a trait, a belief, or self-identity steer an individual toward a compatible outlet, while exposure to such an outlet, in turn, reinforces this original trait, belief, or self-identity. Corresponding to previous findings, it was also

shown here that individuals with stronger ideology were more strongly attracted to media outlets with a homogeneous, likeminded audience. Moreover, using an experimental design, it was demonstrated that audience identity had a distinct role in shaping media choices, regardless of content. As for polarization (i.e. extremity, perceived extremity, and tolerance) processes brought by audience homophily, here a less consistent pattern was found. The evidence was less robust in comparison to evidence for selection, and in the majority of instances the pattern that emerged was only close to significance. Be that as it may, considering that in Study 1 (a) the model predicted change over time, meaning that variance in the dependent variables are relatively smaller, and (b) results were obtained after the traditional selective exposure had been accounted for, the concept of audience homophily could very well have theoretical merit.

It could be that audience homophily has only a limited influence on ideological polarization, yet other aspects, such as social polarization, might be more sensitive to its effects. Recently, Mason (2015) has argued that polarization is a multifaceted phenomenon which has ideological and social aspects, such as negative feelings toward the opposite side (Iyengar et al., 2012). It might be that the distinction between content and audience identity is parallel to Mason's distinction, according to which content strengthens ideological beliefs while audience identity has an effect on group identity and social elements tied to politics. On a more positive note, although the experiment aimed at demonstrating the importance of audience homophily, it did also demonstrate that crosscutting exposure is possible under some circumstances. It seems that when opposite content is endorsed by likeminded websites, the chances of crosscutting exposure increases dramatically.

In the context of the ongoing discussion on the effects of media in general and partisan media in particular, the findings mostly side with those claiming that media-effects research should not be disregarded (Holbert et al., 2010). Indeed, reinforcing spirals can be identified in many other spheres of life, including health issues, scientific beliefs, and maladjustment behaviors (Feldman et al., 2014; Slater, 2007). In communication studies, therefore, a more inclusive model of media effects is in order, one that can serve as an umbrella theory for many lines of research (e.g. Eveland and Cooper, 2013).

Additionally, reinforcing processes, in particular polarization, may be accelerated by user-generated features found on some websites. The option of writing comments moves website users from passive to active mode, a shift promoting self-consistency (Fazio et al., 1984). But even simply reading what other users have written can enhance a sense of community homogeneity, engendering or endorsing one-sided argumentation. Thus, in a way, such websites serve as echo-chambers, since the same opinions bounce back and forth among websites managers and writers as well as audience members.

User-generated features could also be imperative when considering a question left open here: how do users determine the identity of a website audience? One could imagine two main sources of information shaping this perception. First, news sites today use user-generated features such as user comments and social plugins (i.e. buttons which link news sites with social network sites, such as a Tweet or Like button). These plugins expose users to other audience members, and hence supply information regarding website-audience identity. In addition, such plugins allow audience members to see who among their friends in social network sites have recommended a given website. As such,

one's social network could hint at the "correct" websites to visit. Second, much like scholars believe that partisan media target likeminded audiences, content slant may in the same way convey to the layperson the identity of a website's audience. More research is needed to answer this question, which introduces the idea of "imagined audience," previously studied in social network research, into the world of news media.

It is worth noting that the level of audience homophily was found to be influenced not only by the extremity of political ideology, but also by one's position on the left–right continuum: individuals embracing right-wing ideology showed higher levels of audience homophily. Political scientists researching a variety of topics in the field have claimed that the right-wing displays a higher tendency toward homophily (e.g. Garrett and Stroud, 2014). This propensity has usually been explained via psychological motivations underlying right-wing ideology, including reduced tolerance to ambivalence and a stronger need for threat reduction (Jost et al., 2008). All of these have been cited as motivations of advocates of right-wing ideology to seek out homophily, and with it the promise of a safe and familiar niche—a behavior also evident in their higher levels of audience homophily.

While this study has undeniable advantages in that it combines experimental design, survey data, and full web activity logs subjected to content analysis, it has several limitations. First, only the web activity that each participant engaged in on a particular computer was recorded. Therefore, any online activity carried out elsewhere or using mobile devices was not accounted for, where the participants may have browsed different current affairs sites. That said, it is entirely plausible that brand loyalty and force of habit would lead users to choose similar sites on their various platforms.

While the use of actual web activity log data in this project offers many technical advantages, multiple challenges remain to be addressed by future research. For example, password-protected websites were not accessed by our researchers or coded, including the materials that the respondents read or watched on Facebook. For the current data, however, this omission does not constitute a grave shortcoming as only 7% of the URLs in the sample were Facebook pages. However, as more of our political-information consumption moves to social networking websites, scholars will have to find ways to access even password-protected content—of course, with the participants' informed consent. While online exposure was measured using web-tracking data, offline media use in the first study was measured by means of self-report, yet the reliability of such measures is under debate (Goldman et al., 2013; Prior, 2013). In addition, I determined the audience conservative share—that is, the percentage of conservatives among the audience of each website—using a rather small sample. The data here were corroborated by comparing them to the perceptions of audience political leaning of the studied websites which were obtained from a different sample (see Note 4). However, a more efficacious approach would have been to rely on external data about traffic to media outlets using such companies as ComScore or Nielsen (Gentzkow and Shapiro, 2011). Unfortunately, no reliable external data on Israeli websites are currently available.

As for survey measurements, polarization and accessibility were tested only according to self-placement on a left–right scale. Although Knobloch-Westerwick and Meng (2011) have found that partisan media influenced the accessibility of political self-definition but not of issue positioning, more elaborate indicators for self-definition could have increased the validity of the results. Likewise, the scales used here are less

preferable methodologically in comparison to the dichotomous option taken by Knobloch-Westerwick and Meng, who opted for the traditional approach in response-latency measurements. Furthermore, it has been argued that political tolerance is best captured by asking participants which social group they hate the most (Sullivan and Transue, 1999). This approach was not implemented here, as we measured a general level of tolerance and intolerance toward the opposite side.

Finally, the population tested in the current study was an "opt-in" sample, which means that participants had selected themselves for the study. This is a common problem in survey studies, which recently have had an extremely low response rate. In this case, however, the combination of a longitudinal design and a tracking program increases the probability of revealing any biases present.

On the whole, assuming that need for consistency guides individuals when navigating the new media landscape, it seems that content is not the only characteristic of media fulfilling this need. The crux of this study was to establish the role of audience identity in this respect. More research is needed to delve into the diverse and complex online environment which underscores the social elements of media consumption, and hence we call for a broader prism to assess the influence of partisan media.

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Notes

1. Israeli Arabs, who at the time of the study comprised approximately one-fifth of the Israeli population, are not included, because the ideological outlets included in the study were all Hebrew language and that the affective polarization measure is specific to the Jewish Israeli population. The Israeli Arab group should of course be studied in future research.
2. The items are specified in Online Appendix A: http://onlinappendix.weebly.com
3. A more detailed description is available in Online Appendix C.
4. An additional experiment on a sample of 200 students was conducted. In this experiment, there were five experimental conditions: congruent/incongruent content only, congruent/incongruent audience only, congruent audience/writer, incongruent audience/writer, and inconsistent audience + consistent content[4]/consistent audience + inconsistent content. The results are available in Online Appendix E.
5. To assess strength and persuasiveness, we asked all participants who did not report a clear political leaning on the sorting question ($N=325$) to read a pair of articles from a set of four pairs; each pair dealt with a different topic, with one article presenting a left-wing attitude on the issue and the other presenting a right-wing attitude. All articles were taken from popular news websites. Articles were evaluated using questions obtained from Taber and Lodge (2006); from the four pairs, the one with the smallest mean differences in evaluation was selected (no significant difference: mean difference $=-0.09$, standard deviation [SD] $=1.2$, $t=-0.77$, $p=.44$).
6. To eliminate the possibility that audience identity was actually interpreted by participants as an indicator of credibility, the results were also reanalyzed controlling for trust in likeminded partisan media and trust in different-minded partisan media using scales adopted from Tsfati and Cappla (2003). The results were consistent with those reported here. A full description is available in Online Appendix F.

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Author biography

Shira Dvir-Gvirsman is an assistant professor at the Department of Communication, Tel Aviv University. Her research focuses on motivational information processing, public opinion, and effects of partisan media.