The Milieu of Israeli Identity Politics:  
An Agent-Based Approach to Democratic Tribalism

Abstract. This project provides an innovative theory and model for projecting Israeli domestic politics. In recent decades, a form of democratic tribalism based on distinct identity groups has come to define Israeli politics. Accordingly, our study focuses on the emergent behavior surrounding the formation of political coalitions and deriving from the interaction of Israeli identity groups and media-driven political issues. By fusing identity theory with computational agent-based modeling, the study sheds further light on the general role of identity groups, their demographic fluctuations, interaction with the media, interpassivity with other identity groups, and fixed political preferences, which make them distinct from the onset. In particular, the study employs computational simulations to project and show how demographic/cultural change in Israel over the next two decades will likely shift Israeli politics further to the right.

Keywords: agent-based modeling; identity theory; Israeli politics, democratic tribalism

Benjamin Acosta* and Hafsa Aasi** with George Haugh

*School of Politics and Economics,  
Claremont Graduate University,  
150 E. 10th St., Claremont, California 91711  
benjamin.acosta@cgu.edu

**School of Information Systems and Technology,  
Claremont Graduate University,  
130 E. 9th St., Claremont, California 91711
1 Introduction

Since peace talks between the State of Israel and the Palestine Liberation Organization (PLO) began in 1993, many within the international community have held high expectations for the resolution of the Israeli-Palestinian conflict. As nearly two decades have passed without the two sides reaching a final-status agreement, and after a drastic increase in violence over the last decade, the outlook for a resolution remains doubtful. Yet, with regard to negotiations, expectations still stand high. U.S. presidents, U.N. officials, and other leaders within the international community have consistently maintained an expectation that Israelis and Palestinians can “achieve” peace. Oftentimes, however, such leaders and officials neglect Palestinian and Israeli domestic politics, viewing each side as static, unchanging, and situated on some kind of progressive linear path toward a lasting peace resolution.

Contrary to such a perspective, domestic politics establishes the capabilities of respective Palestinian and Israeli leaders to negotiate with the other side. Since the democratic election of Hamas in 2006 and the deadly clashes that occurred in June of 2007 between Hamas and Fatah, Palestinian political leadership has become increasingly fragmented with Hamas heading the Palestinian Authority (P.A.) in Gaza and Fatah claiming legitimacy to rule in the P.A. in the West Bank. Such fractures greatly affect the ability of Palestinian leaders to negotiate with Israel’s government. At a glance, the current nuances and foreseeable direction of Israeli politics looks even less clear, though it remains equally important for the potentiality of an eventual peace resolution.

A number of factors account for the shifts in Israeli politics. Israeli society has gone through a number of demographic changes in recent decades, which has affected the Jewish state’s domestic politics. Jews with different ethnic and cultural signifiers and levels of religiosity tend to hold different political views [15, 16]. As of 2002, the Israeli population was roughly 40 percent ethnically Ashkenazi (European) and 40 percent ethnically Mizrahi (African and Asian), with Arab-Muslims, Arab-Christians and Druze making up most of the remainder of the population. Yet, from 1990 to 2000 at least 900,000 people immigrated to Israel from the former-Soviet Union (FSU) [9]. While ethnically Ashkenazi, Russian-speaking FSU Jews had a distinct cultural and ideological make-up that differentiated their political goals and viewpoints of Israel’s purpose and future [17]. Today, Israeli society views the Russians/FSU population as a “separate ethnic group in addition to Ashkenazim, Mizrahim, and Arabs [17].” In addition, the last few decades have seen the elevation of religious goals within traditional Mizrahi, Ashkenazi ultra-Orthodox and national-Orthodox political outlooks. Already by the turn of the century in Israel, “there was growing concern over the widening divisions between different identity-based groups that lacked a core identity or unifying project [3].” Indeed, this trend has continued. Moreover, a form of “democratic tribalism,” wherein varying political preferences derived from ethnic, cultural and religious differences distinguish Israeli sub-groups, has come to define Israeli politics as a whole [1].

Thus, by evaluating the politics of different Israeli identity groups, identifying their preferences and mobilization patterns, as well as demographic levels, one can paint a
fairly informative picture of domestic Israeli politics in the next couple decades. In an effort to project the political direction of domestic Israeli politics, this project seeks to build a conceptual model by replicating the political relationship between ethno-religious Israeli identity groups, the media, and government coalitions. Further, the project translates the conceptual model into a computational agent-based model, wherein it is possible to observe and test the emergent behavior⁠¹ that drives Israeli politics now and in the foreseeable future.

2 Israeli Politics, Identity Groups, and Demographics

In Israeli politics, “the Left” is consistently relative to where “the Right” is headed. The traditional leftist Israel party—Avodah (Labor)—has diminished in power as its affiliated “social group” has decreased in population. In the last Israeli election in 2009, Labor received just 9.93% of the vote, marking its worst electoral performance in Israel’s 62-year history [18]. In the same election, the fairly new Kadima (Forward) party—made up of former right-wingers—presented itself as the new left-wing party, racking up 22.47% of the vote. Kadima, a party made up of former members of Israel mainstream right-wing party Likud (Consolidation) simply repositioned itself vis-à-vis the right and gained electoral success.

Notably, every Israeli government since the Jewish state’s establishment in 1948 has consisted of a coalition of parties. Minority electoral situations have forced the winning parties of Israeli elections to form coalition governments. Crombez contends that “in minority situations [i.e. where no single party has an absolute majority in the legislature], three types of government can be formed: minority governments, minimal winning coalitions and surplus majorities [7].” Regarding Israel, the latter two types mark the most common. Prior to 1977, the Israeli left formed surplus majorities. Since then, both the left and the right have formed minimal winning coalitions and surplus majorities. Ultimately, Israeli coalitions situate either center-left or center-right, somewhere between a minimal winning coalition and an extensive surplus majority.

Accordingly, this project maintains a number of contentions/assumptions that stand in contrast to current literature of comparative politics. The theory and model resist the temptation to focus on parties as the primary mover of domestic politics. The project does not seek to fill the void of some party-theory lacunae. Rather, it combines innovative and developing theory with computational simulation, with the intent of trailblazing new foci and approaches for comparative politics and related fields. By sideling the traditional party focus, the project jumps directly to the intersection of identity groups and coalitions, and the forces that bring the two together. Simply, it cuts out the political

⁠¹Emergent behavior “occurs when interactions among objects at one level give rise to different types of objects at another level. More precisely, a phenomenon is emergent if it requires new categories to describe it which are not required to describe the [behavior] of the underlying components [11].”
middleman, and contends that dominant identity groups matter more than dominant parties.

Up to the 1977 election, when the second of two main ethnic groups began mobilizing and utilizing their voting power, Israel had consecutive left-wing coalition governments. Since the 1977 elections, Israeli politics “has been polarized into two [general] political camps… This division into two political camps is ethnically marked and reinforced [16].” Simply, most Ashkenazim back the left, and most Mizrahim support the right [16]. The Israeli political right “officially stands for Greater Israel, negotiates toughly before making territorial concessions in exchange for peace, protects Jewish interests more than universal rights, and treats religion favorably [16].” The Israeli political left seeks “the partition of Eretz Israel in order to keep Israel Jewish, the defense of general values, and the restriction of the role of religion in public life [16].” Essentially, both the left and the right pursue the maintenance of the Zionist nature of Israel, yet the left tends to promote universal democratic values, whereas the right favors Israel’s Jewish population.

And while a simple left-right division holds today, the Israeli political environment has become more complicated. As Israel’s Jewish population has become more diverse so has the collective citizenry’s understanding of Israel’s purpose. The Israeli government classifies Israeli citizens under only three categories: Jewish, Arab, and other. In reality, however, the small Middle Eastern country of 7.5 million citizens remains culturally, ethnically and religiously diverse, as well as ideologically divergent in a number of cases. Over the last thirty years the country has witnessed drastic change involving a range of identity groups that rank ethnicity, religion, and/or ideology with varying degrees and perspectives. These differences come to light in preferential treatment of Israeli identity’s core components: Zionism (Jewish nationalism), democratic values, and Judaism—along with an increasingly important role of distinct group interests [3].

Today, Israel’s seven main identity groups stand diverse and divergent on a number of levels. These groups include the secular Ashkenazim, traditional and religious Mizrahim, Russian/FSU-Israelis, national and ultra-Orthodox, and Arab-Israelis (Muslim, Christian and Druze). Israel’s citizenry contains a variety of other distinct identity groups, such as Ethiopians, Circassians, and Black Hebrews, though their contribution to Israeli identity politics has and will likely continue to be minimal due to their low numbers and marginal structural power.

2.1 Identity Groups’ Preferences

In Hebrew, the word Ashkenazim literally stands for “German Jews,” though typically signifies all Jews of European descent. Secular-Ashkenazim founded the state of Israel. Acosta notes: “Israel’s Ashkenazi elite boast many achievements. They (re)constructed a nation from scores of diasporic communities, revived a lifeless language, and (re)established the Jewish state in the Middle East amid the heart of the Islamic world.

2 Ashkenazi marks the singular form of the word.
Within a few decades, they groomed the Southern California-sized country into an economic and military regional power. But despite their many achievements, the Ashkenazi elite have had their day atop Israel’s ethno-cultural hierarchy [2].” Though their previously hegemonic power has diminished, the Secular-Ashkenazim still collectively form the basis of the Israeli political left. Kimmerling recognizes that “secular Jews of Ashkenazi origin...tend to be left wing, support territorial concessions, and have a compromising political attitude toward the conflict [with the Palestinians]; they are considered as structuring a civic and universalistic social order [10].” At around 20 percent of the total Israeli citizenry and maintaining replacement fertility rates, secular-Ashkenazim represent the guardians of Israel’s democratic institutions and mark the chief subscribers to Western political values and goals [5, 8, 13, 15, 17].

In Hebrew, the word Mizrahim literally stands for “Easterners,” though typically signifies Jews of Middle Eastern, North African, Central and South Asian descent; and, the word has come to incorporate Sephardi Jews or Jews originating from the Iberian Peninsula. The late 1970s and 1980s marked the maturing of the Secular-Mizrahim as a social and political force in Israel. Today, Secular-Mizrahim make up almost 30 percent of the total Israeli citizenry [8]. Collectively, the “Mizrahim constitute the backbone of right-wing politics in Israel [17].” Treated poorly by the ruling Ashkenazi elite upon arrival to Israel, a “sense of trauma and injustice can account for the rejection that most Mizrahim feel toward the left [16].”

Like their less religious co-ethnics, the Religious-Mizrahim hold right-wing political stances [10]. Yet, unlike the Secular-Mizrahim, they focus more on intra-group interests as they tend to be poorer and have lower degrees of education. Both groups of Mizrahim remain more “traditional” than either secular or religious, yet the poorer of the two segments focuses on religious Sephardi identity as a means of upward social mobility [17]. The Religious-Mizrahim make up around 7 to 8 percent of the total Israeli citizenry [15].

As of 2006, the Russian/FSU population of Israel remained above 14 percent of the total Israeli citizenry. Secular-Russians hold many similarities to the Secular-Ashkenazim, though with some key distinguishing factors. Smooha contends: “Although Russian immigrants came from the post-communist bloc, they were strongly oriented to the West and many saw themselves as Westerners. They shared with the [secular-Ashkenazim] cultural patterns such as the Protestant work ethic, secularism, the importance of investment in education and in children, and low fertility, but differed from them in other areas such as respect for the rule of law and democratic values [17].” Ultimately, Russian-Israelis view their “Russianness” as the primary component of their collective identity [4]. In the past, Russian/FSU parties have participated in government coalitions with both the left-wing and right-wing blocks, but recently have veered to the right, as exemplified by the politics of Yisrael Beiteinu leader Avigdor Lieberman.

---

3 Mizrahi represents the singular form of the word.
4 Calculated from [17]
Ultra-Orthodox Ashkenazim remain at the margins of Israel society, yet maintain a fairly engaged political consciousness. Friedlander notes: “[the ultra-Orthodox represent a] contra-acculturation group, which favor[s] turning away from the contemporary way of life in order to preserve traditional ways…Israel’s ultra-orthodox group ‘strives to separate itself not only from every aspect of the outside world culture, but also from people or things that, having passed near or through that world, carried contaminating elements of it [8].’” Today, the ultra-Orthodox mark about 4 to 6 percent of the total Israeli citizenry [15].

Unlike the ultra-Orthodox, national-Orthodox Ashkenazim engage Israeli society and politics openly and as full-fledged Zionists. Friedlander summarizes: “[they represent an] acculturation group [that favors] the promotion of cultural contact with the outer world, while retaining Jewish culture and beliefs [8].” Also in contrast to the ultra-Orthodox, the national-Orthodox stand firm on right-wing Zionist issues and focus less on intra-group interests.

By 2009, the Arab population numbered at 1.488 million people, representing 20 percent of the total Israeli citizenry [6]. Standing today at one-fifth the total Israeli citizenry, the Arab Muslim, Christian and Druze populations represent a symbolic threat to the longevity of Israel as a Jewish state. Arab-Israelis accordingly play the role of the eternal outsider within Israeli citizenry. This shapes their political and ideological outlooks. While Druze have largely integrated into the Zionist social and political framework [12], Arab-Muslims and Arab-Christs overtly challenge the Zionist character of Israel [1].

2.2 Population and Demographic Projections

In summation, the current demographic make up of Israeli citizens follows: secular and traditional Ashkenazim are around 20 percent, secular and traditional Mizrahim represent about 29 percent, Russians and other citizens from the former-Soviet Union make up around 14 percent, Orthodox, religious and more traditional Mizrahim mark about 7 percent, ultra-Orthodox Ashkenazim comprise around 5 percent, national-Orthodox Ashkenazim make up roughly 4 percent, and Arab-Israelis of varying religious backgrounds stand at a solid 20 percent of the total Israeli citizenry of 7.5 million people.

Demographic change in the future rests largely on fertility/birth rates and percentage of birthing-age women, and each Israeli identity group has their own set of factors. By 2030, Israel’s Central Bureau of Statistics expects the Arab-Muslim, Christian and Druze population to stand above 2.3 million people, marking around 24 percent of the total Israeli citizenry [6]. This in part to the high fertility rates of the respective Arab-Israeli groups: Arab-Muslims and Druze stand at 4.0 children per woman, which nearly doubles the replacement rate, and Arab-Christs remain at 2.4 children per woman [8]. The Secular-Ashkenazim and Secular-Russians maintain replacement birthrate levels [8]. Mizrahim maintain a 2.2 fertility rate. Ultra-Orthodox and national-Orthodox maintain fertility rates of 6.0 to 7.0 per woman [8].
3 Theory

Thus, how will demographic/cultural change affect Israeli politics in the next two decades? An answer to this question can provide insight into the likely increase or decrease of support among Israelis for or against peace negotiations in the foreseeable future. The model seeks to answer this question generally by determining shifts from the current state of Israeli politics.

We hold a number of theoretical assumptions. First, Israeli identity groups divide along the lines of ethno-religious, cultural, and ideological cleavages. Second, regarding the formation of governments, identity groups matter more than parties. Third, each identity group maintains a varying set of political preferences and spends a varying degree of its potential political capital. Fourth, dominant issues in the media play a key role in prompting identity groups to divide and spend their political capital.

The interaction of these assumptions comes to life in a unique environment wherein a form of democratic tribalism functions around ethno-religious divides and in response to the contradictory sources of Israeli national identity, i.e. Zionism (Z), democracy (D), and Judaism (J). These sources, with the addition of intra-group (G) concerns, comprise the basis of an identity groups’ hierarchal political preferences. Further, dominant issues in the media focus on topics related to Zionism (e.g. national security, the durability of Israel’s Jewish majority, etc.), democracy (political participation of non-Jews, universal values, peace negotiations, etc.), Judaism (e.g. laws governing the Sabbath, the sanctity of holy places, etc.) and intra-group interests (e.g. pension insurance, military draft deferments, etc.). The interaction of such issues with identity groups prompts political mobilization and the spending of political capital.

3.1 Hypothesis

With the well-entrenched political preferences of identity groups, and with regard to current demographic numbers, it is likely that demographic/cultural change will continue to push Israeli politics to the right for the foreseeable future. The project seeks to test this hypothesis with coalitions marking the dependent variable, and identity groups and issues in the media representing the independent variables.

4 Converting the Conceptual Model into a Computational Model

Getting the conceptual model right is imperative to generating meaningful results. However, in the context of agent-based modeling, modelers must also take great care when translating the conceptual model into a computational model in order to maintain
the validity and reliability of the model. In computational agent-based modeling, modelers use a computer simulation program to conduct virtual experiments, iterated repetitively for the purpose of obtaining reliable results.

The project utilizes NetLogo version 4.1.1 to implement the conversion from the conceptual to the computational. It employs the programming language Logo. The program environment has a number of qualities beneficial to our project. A simple graphical user interface (GUI) visually represents the model. A black rectangle visually represents the world of the agents whose interactions come under observation. Using sliders we created agents, known as turtles in NetLogo. One can adjust the value on each slider, allowing the researcher to run and test the model with a variety of different inputs.

For the computational model, we created a total of eleven different types of agents as distinct breeds in NetLogo. Accordingly, we created a total of eleven corresponding sliders. The first seven breeds represent the agents of the seven main ethno-religious identity groups residing in Israel, including “Secular Ashkenazis,” “Secular Mizrahis,” “Secular Russians,” “Religious Mizrahis,” “Ultra-Orthodox (Ashkenazis),” “National-Orthodox (Ashkenazis),” and “Arab (Muslims, Druze, and Christians).” The last four breeds represent the different categories of issues that typically appear in the Israeli media, including DEMOCRACY, ZIONISM, JUDAISM and INTRA-GROUP issues. We assigned a fixed amount of political capital for each ethno-religious identity group breed to spend for each of the four different issue categories.

4.1 Representing Theory in Our Model

The model simulates the political interaction of identity groups and media issues, and concludes with the formation of a coalition type of either center-left or center-right. When the model is setup, agents in each identity group and issue category are created in quantities set by the researcher on the corresponding sliders. When the model runs, the issues move around in the NetLogo world, impacting neighboring agents belonging to different ethno-religious identity groups. During run-time, for each iteration, the number of each category of immediate issue neighbors within the eight patches surrounding an agent from a distinct breed representing a person from a specific ethno-religious group is counted. A running count of these issue neighbors for each agent representing a person is updated in each iteration, also known as a tick in NetLogo. In each iteration, this running

---

5 “A measure is reliable to the extent that it gives the same result again and again if the measurement is repeated.” Additionally, a “measure is valid if it actually measure what it purports to measure [14].”

6 Importantly, we have tested the validity and reliability of the computational model as an accurate representation of the conceptual model, as well as the validity and reliability of the conceptual model as an accurate representation of reality. We achieved confirmation by comparing the data obtained from the computational model with real-world data for all 18 of Israel’s elections.

7 To view the code, see NetLogo Models Library.

8 Each iteration marks one calendar day. The program runs for 1232 days, representing the average number of days between Israeli elections.
count of issue neighbors for every person agent present in the NetLogo world is used to compute the total political capital spent by members of each ethno-religious group for each issue category in each iteration.

In the model, coalition formation revolves around the outcome of political capital spent on the varying issues. Two issues—DEMOCRACY and ZIONISM—hold positive or coalition forming capabilities. The other two represent negative issues that simply take away potential political capital from either of the two coalition-forming issues. If the total political capital computed for DEMOCRACY issues comes out greater than for ZIONISM issues, then the model projects the formation of a center-left coalition. Inversely, if the total political capital computed for ZIONISM issues reach higher levels than for DEMOCRACY issues, then the model projects the formation of a center-right coalition.

The idea that preferences are fixed and not influenced by other agents is unique to our model and ensures a distinction from previous forecasting work on decision-making. Because our agent’s interactions are limited there is also no recourse to game theoretic principals. As such, our model journeys beyond the current norms of most predictive political models. The effect of the agenda setting mechanism can have interesting effects. For example, if a ZIONISM rather than DEMOCRACY issue prompts a Secular-Ashkenazi agent, its six political capital points will be in effect wasted and its (slight) support will instead fall behind a center-right coalition formed by a majority of ZIONISM votes. Unlike other models that assume constant actions by agents, this model takes into account variant levels of mobilization due to dynamic political considerations.

4.2 Hardcoding the Preferences of Identity Groups

In the model, preferences and mobilization are linked. Issues in the media function as the ignition. But preferences are hardcoded in the form of potential political capital points spent on the four issue categories. The coding allots each identity group ten political capital points divided among four general political preferences: ZIONISM (Z), DEMOCRACY (D), JUDAISM (J) and INTRA-GROUP (G).9

The hardcoding of preferences has a number of implications. It suggests that the ability of identity groups to influence other identity groups is limited. Effects of one group on another are negative or interpassive rather than positive or interactive. Groups do not directly convince other groups to change their belief patterns but rather the prompting of a group’s agent by an issue agent slightly detracts from the possibility of other agents from other groups interacting with that issue. The hardcoding of identity group’s political preferences reflects the subscriptions to various values and beliefs that form distinct social groupings from the onset.

9 Z, D, J, and D refer generally to all political concerns. They foremost represent values rather than direct ideological signifiers. For justification for the hardcoding of preferences, see the section above entitled “Israeli Politics, Identity Groups and Demographics.” See the model for the specific preference coding for each group.
4.3 Replications

With our model, we replicated all 18 of Israel’s elections (from 1949 to 2009) with varying degrees of success. The difference between coalition victories in actual and simulated elections ranged from zero to 13 percent, with an average margin of error of 3.94 percent. See Figure 1 for the comparison of the actual elections to the replicated elections.

<table>
<thead>
<tr>
<th>Year</th>
<th>Israeli Elections: Winning Coalition Type</th>
<th>Average Result of Replicated Elections</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1949</td>
<td>Center-Left: 57% of the vote</td>
<td>Center-Left: 65% of the vote</td>
<td>8%</td>
</tr>
<tr>
<td>1951</td>
<td>Center-Left: 53% of the vote</td>
<td>Center-Left: 60% of the vote</td>
<td>13%</td>
</tr>
<tr>
<td>1955</td>
<td>Center-Left: 63% of the vote</td>
<td>Center-Left: 62% of the vote</td>
<td>1%</td>
</tr>
<tr>
<td>1959</td>
<td>Center-Left: 69% of the vote</td>
<td>Center-Left: 61% of the vote</td>
<td>8%</td>
</tr>
<tr>
<td>1961</td>
<td>Center-Left: 60% of the vote</td>
<td>Center-Left: 63% of the vote</td>
<td>3%</td>
</tr>
<tr>
<td>1965</td>
<td>Center-Left: 61% of the vote</td>
<td>Center-Left: 60% of the vote</td>
<td>1%</td>
</tr>
<tr>
<td>1969</td>
<td>National Unity: 84% of the vote (Left: 53%; Right: 31%)</td>
<td>Center-Left: 58% of the vote</td>
<td>5%</td>
</tr>
<tr>
<td>1973</td>
<td>Center-Left: 51% of the vote</td>
<td>Center-Left: 59% of the vote</td>
<td>8%</td>
</tr>
<tr>
<td>1977</td>
<td>Center-Right: 48% of the vote</td>
<td>Center-Right: 55% of the vote</td>
<td>7%</td>
</tr>
<tr>
<td>1981</td>
<td>Center-Right: 50% of the vote</td>
<td>Center-Right: 50% of the vote</td>
<td>0%</td>
</tr>
<tr>
<td>1984</td>
<td>National Unity: 81% of the vote (Left: 38%; Right: 43%)</td>
<td>Center-Left: 50% of the vote</td>
<td>12%</td>
</tr>
<tr>
<td>1988</td>
<td>National Unity: 76% of the vote (Left: 30%; Right: 46%)</td>
<td>Center-Right: 52% of the vote</td>
<td>6%</td>
</tr>
<tr>
<td>1992</td>
<td>Center-Left: 49% of the vote</td>
<td>Center-Left: 58% of the vote</td>
<td>7%</td>
</tr>
<tr>
<td>1996</td>
<td>Center-Right: 54% of the vote</td>
<td>Center-Right: 53% of the vote</td>
<td>1%</td>
</tr>
<tr>
<td>1999</td>
<td>Center-Left: 59% of the vote</td>
<td>Center-Left: 58% of the vote</td>
<td>1%</td>
</tr>
<tr>
<td>2003</td>
<td>Center-Right: 54% of the vote</td>
<td>Center-Right: 60% of the vote</td>
<td>6%</td>
</tr>
<tr>
<td>2006</td>
<td>Center-Left: 53% of the vote</td>
<td>Center-Left: 55% of the vote*</td>
<td>2%</td>
</tr>
<tr>
<td>2009</td>
<td>Center-Right: 62% of the vote</td>
<td>Center-Right: 66% of the vote</td>
<td>4%</td>
</tr>
</tbody>
</table>

Figure 1

In each simulation, the model selected the winning coalition type (either center-left or center-right) that received the actual historical mandate, with the exception of the 1984 election. However, the 1984 election marks one of three Israeli elections wherein the government brought together the two main political camps to form a “national unity” government. Our model presented a center-left coalition receiving 50 percent of the vote; while the percentage and coalition type was off, this finding symbolizes the split mandate in 1984 that ultimately led to a national-unity government.

5 Forecasts, General Findings and Further Research

After replicating all previous Israeli elections and running a variety of sensitivity analyses, we ran tests projecting Israeli elections in the next two decades. Utilizing demographic projections, we forecast Israeli politics for 2020 and 2030 respectively. We tested the demographic changes in conjunction with a variety of political media scenarios. See our findings and parameter settings in Figure 2.

---

10 We ran each election simulation 40 times, and took the average of the findings.
The findings reinforce our hypothesis that it is likely that demographic/cultural change will continue to push Israeli politics to the right for the foreseeable future. There are a number of interesting nuances within the tests. In 2020, the Israeli left remains politically viable so long as DEMOCRACY issues are dominant in the media, or if INTRA-GROUP interests become more important than issues concerning Israel’s Zionist character or democratic nature. Other than those two instances, the Israeli right likely maintains, if not slightly increases, its current political advantage vis-à-vis the Israeli left. In 2030, the Israeli right solidifies its dominance. In each set of issue circumstances, the Israeli right increases its electoral advantage. In the one circumstance where a center-left coalition forms the government, it does so with a nine percent drop from a decade prior. In cases where issues of ZIONISM represent at least 30 percent of the issues in the media, the Israeli right wins elections with at least 72 percent of the total vote. With the wide variety of issue scenarios, demographic change accounts for the slight shift to the right in 2020, and a further shift to the right by 2030.

In addition to the particular findings on Israeli politics, the model suggests a number of general findings. As the emergent behavior deriving from the interaction of identity groups and political issues drives the formation of political coalitions, it is possible in research to cutout the middleman of coalition or electoral politics—namely, political parties. As a result, the findings shed further light on the importance of identity groups, their demographic fluctuations, interaction with the media, interpassivity with other identity groups, and fixed political preferences, which make them distinct from the onset.

Further research within this developing theoretical framework—made possible by computational agent-based modeling—should focus on the components of a political environment and how they function together interactively and interpassively to comprise a ‘sum that is greater than the individual parts.’ Our model offers a unique design for studying coalition formation in democratic states that have a complementary nation
housing numerous distinct identity groups. Effectively, researchers could use its framework for, and in extensions to, other political environments. Coalition formation marks only one of a limitless variety of currently opaque socio-political phenomena that the combination of identity theory and computational agent-based modeling can help illuminate.

References

4. Ben-Rafael, E. “Mizrahi and Russian Challenges to Israel’s Dominant Culture: Divergences and Convergences,” Israel Studies 12, no. 3 (Fall 2007)