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## ‘Good American citizens’: a text-as-data analysis of citizenship manuals for immigrants, 1921–1996

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### ABSTRACT

What does it mean to be a ‘good American’? Immigrants to the United States have obtained civic knowledge in a variety of ways, including federal textbooks and independent learning, and in different contexts over time, from employer-organised classes to handbooks written by civil society groups. This paper analyses citizenship manuals from one such group – the Daughters of the American Revolution (‘D.A.R.’) – to trace continuities and changes in definitions of American citizenship over the twentieth century. This paper is the first to make use of these manual archives, which contain over 30 different citizenship manuals, printed between 1921 and 1996. To compare and analyse the corpus of manuals, the paper employs both computer-assisted content analysis through topic modelling and textual interpretation. This approach provides rich descriptive evidence of how American citizenship norms change over a century, the influence of scarcity and war on that identity, as well as the changing role for organisations like the D.A.R. in the civic education of immigrants.

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## Introduction

What does it mean to be a ‘good citizen’? How do immigrant-receiving states articulate the content of national membership for newcomers? In the United States, the answers to these questions vary greatly over time. The US has been practicing immigrant civic education for over a century, with the Federal Naturalization Service distributing civic educational materials to immigrants as early as 1906. Its current model – a ten-question civic knowledge test, English test (speaking, reading, writing), and naturalisation ceremony, is only the most recent incarnation of over a century of civic education.

Variation is also a product of practice. To prepare for the US naturalisation test, the US maintains a maximally *laissez faire* model of immigrant education and integration (Bloemraad 2006b). There are no federal agencies, guidelines or policies for immigrant integration. Instead, the task of making immigrants into citizens has fallen on society, especial local communities (Williamson 2018) and, in particular, voluntary efforts by civic organisations, churches and other non-state actors. As such, US political institutions rely on community partnerships with these organisations to promote the integration and socialisation of adult immigrants (De Graauw and Bloemraad 2017). While the

instruments of civic education have changed over time, the de-centralised, community-led structure of integration has not. Therefore, describing the content of American citizenship over time necessitates a direct examination of civil society actors.

This paper examines one such group – the National Society of the Daughters of the American Revolution (D.A.R.) – and its sustained efforts at civic education over the twentieth century. Founded in 1890, this nonprofit organisation engages in grassroots work by local chapters, dedicated to ‘promoting patriotism, preserving American history and securing America’s future through better education.’<sup>1</sup> In line with this mission, the D.A.R. has prepared and distributed free citizenship manuals for immigrants between 1921<sup>2</sup> and 1996, defining ‘Americanization’ by highlighting a variety of topics over time, from ‘finding work’ to ‘how to naturalize’ to ‘learning English.’ This corpus of documents – spanning over 75 years – provides rich textual data of American citizenship over the twentieth century.

This paper employs structural topic modelling to systematically analyse civic education manuals from the fixed perspective of one civil society organisation. Topic modelling is a useful tool of analysis and features centrally in the ‘text-as-data’ sub-literature. Political scientists have employed a variety of automated methods for analysing text, including open-ended survey responses (Roberts et al. 2014), political speeches (Grimmer and Stewart 2013; Grimmer 2013; Schonhardt-Bailey 2006), traditional media (Riffe et al. 2019) and social media (Lucas et al. 2015). In this vein, this paper leverages a topic model across a historical archive – the first to use the D.A.R.’s archive of manuals – to construct a novel depiction of continuity and change in American citizenship. It enables a new view of the substance of American citizenship – as framed for the immigrant audience – by following closely one, the wide-reaching civic organisation over time.

A novel depiction of American citizenship is not merely proof-of-concept of the descriptive utility of topic modelling in historical documents. This approach contributes a substantively new perspective to the canon of existing research that examines American citizenship through the lens of government institutions and policy (Gordon 2007; Higham 2002; Martin 2010; Motomura 2006; Pickus 2007; Portes and Rumbaut 2006; Zolberg 2006), including federal textbooks (Wan 2014). It makes both empirical and theoretical contributions. Empirically, none of these works provide a systematic, longitudinal study of citizenship from the fixed perspective of civic organisations, despite the integral role these groups play in immigrant integration over time. Theoretically, the prevailing view within this literature is that American citizenship reflects a hybrid of multiple traditions, blending liberal and civic republican philosophies over time (Schildkraut 2010; Smith 1999). The analysis here provides an external test of this consensus view, confirming it by identifying and mapping liberal and republican themes across manuals over time. Thus, it corroborates a civic organisational perspective with a government/institutional one.

This paper proceeds in three parts. First, I provide a conceptual overview of citizenship, its multiple meanings, and how American citizenship has been characterised within these frameworks. This includes theoretical distinctions between liberal and republican traditions, as well as an empirical primer to the period of Americanisation, when the subject of analysis (D.A.R. manuals) was first introduced. Second, I present the data – details of the archive *cum* text corpus – and procedures of structural topic modelling (specifically, passing a Latent Dirichlet Allocation (LDA) model over the corpus). Third, I discuss findings of the topic model, identifying patterns or periods of content

continuity and change between 1921 and 1996. Since topic modelling as an unsupervised method does not specify the conceptual structure of the text beforehand (Lucas et al. 2015, 260), I pair these results with a close textual analysis to analyse documents. With these two approaches, I construct an inductive, descriptive picture of American citizenship over the twentieth century, in which topic patterns reflect historical periodisation, with evidence, for example, of the influence of scarcity and war, as well as the role of citizen as ideologue.

Some caveats and qualifiers are warranted at the outset. The D.A.R. is not an uncontroversial organisation. It is an historically white organisation ‘with a record of excluding blacks so ugly that Eleanor Roosevelt renounced her membership in protest.’<sup>3</sup> For this reason, I make no claims that the D.A.R.’s manuals represent the generic American organisational experience over time, though they were fairly reflective of mainstream opinion during the period of Americanisation. Nor is the D.A.R. the only organisation that partook in civic education; groups like the Hebrew Immigrant Aid Society (HIAS) sporadically released citizenship manuals and employers like Ford Motor Co. took part in employee training in English and civics. The D.A.R. is but one organisation among many. The findings here are, thus, internally valid to the organisation, and caution should be exercised in cross-organisational comparisons.

Despite these limitations, the D.A.R. presents the most consistent – and frequently updated – depiction of American citizenship over time among civic organisations. Since 1921, D.A.R. manuals were written or updated every couple of years, yielding 44 documents total. Of these, there are 27 unique documents (i.e. some documents are re-issued in later years without changes). This scope is unmatched by other groups. Further, the D.A.R. manuals had extensive reach and popularity; with ‘nearly 10 million copies have been given out’ between 1921 and 1970 (DAR 1971) which, according to official records, this time period saw approximately 11.5 million immigrants obtained eligibility for citizenship.<sup>4</sup> Finally, their explicit endorsement and use by the US government not only reflects their status as mainstream but contributed to their reach. As the D.A.R. was an active participant in the Americanisation period among others, the continuity of manuals over time makes it a strong ‘fixed point’ from which to establish a baseline of content analysis in the Americanisation period and trace the evolution of American citizenship content over time.

## Concepts of citizenship and classifying the US case

Citizenship is a multidimensional concept: a status, set of rights, and an identity (Bosniak 2000; Joppke 2010). As a status, it establishes membership in a political community through rights and protections. This is a strictly legal perspective (e.g. Aleinikoff and Klusmeyer 2002). Yet, in different circles, those rights conveyed by legal status also constitute types of citizenship. This second, rights-based perspective is inspired by T.H. Marshall’s (1950) distinction of civil, political and social rights *qua* citizenship. And, as a category of belonging, citizenship creates insiders and outsiders, conveying a sense of belonging and national identity (e.g. Brubaker 1992).

Dovetailing these dimensions, citizenship has a further meaning: a set of behavioural norms about a citizen’s role in politics. That is, with status, rights, or identity, a citizen is enabled to participate in politics. Norms or civic expectations can be studied by looking at public opinion (a behaviouralist approach, e.g. Dalton 2008) or through critical

examinations of the philosophical underpinnings that define a citizen's role in politics (a political theory approach). In the latter, two traditions predominate: liberalism and civic republicanism. These philosophies instruct civic principles, that is, how a citizen acts in a political community. The liberal model primarily understands citizenship as legal status. It traces its origins to the Roman Empire, in which the expansion of the Empire also conveyed the expansion of citizen rights (Pocock 1995), where the citizen was conceived primarily as a rights-bearing individual. Civic republicanism pivots away from what the individual receives and toward their agency and duty. Its origins include Aristotle's notion of citizens-as-officeholders to Rousseau's *Social Contract*, which introduces the obligation of active participation in co-creating laws. As Kivisto and Faist (2015, 50) summarise: 'The republican tradition in particular is concerned with activities that contribute to the public good' while 'the liberal tradition seeks a more minimalist set of duties on the part of citizens.' These are not unproblematic citizenship models (Kymlicka 1995; Heater 1999), but they serve as a framework for comparing rights – versus duty-based models in practice.

In fact, this framework has been instrumental for scholars in characterising American citizenship.<sup>5</sup> The US is typically treated as exceptional or *sui generis* to more traditional nation-states when it comes to classifying citizenship by philosophy. Two factors support this approach. First, unlike the postwar immigrant receiving-state of Western Europe, which draw on centuries-long narratives of nationhood (Brubaker 1992; Kohn 1944), American citizenship is interwoven with concepts of immigration and race since its inception (FitzGerald and Cook-Martin 2014; Jones 2018; King 2009; Motomura 2006). Second, and related to its diverse origins, European nation-states are largely regarded as embodying ideal-type philosophies of citizenship – the UK quintessentially liberal and France quintessentially republican, uncomplicated by longer narratives of immigration, while the US presents as a more challenging case. As a result, one of the clearest points of consensus in the study of American citizenship is that there is no one model or philosophy of citizenship. It is a layered, hybrid civic identity, comprised of liberal and republican values as well as egalitarian and hierarchical features. As Roger Smith (1993, 550) succinctly argues, 'American politics is best seen as expressing the interaction of multiple political traditions, including liberalism, republicanism, and ascriptive forms of Americanism, which have collectively comprised American political culture, without any constating it as a whole.'

Just as there are multiple philosophical traditions, so too are there additional layers. American citizenship contains both ethnocultural and incorporationist elements (Schildkraut 2005), where exclusionary attitudes are oftentimes grounded in principles of civic fairness (Levy and Wright 2020). This sort of pluralistic view of American identity is aptly articulated by Michael Walzer (1990, 614), who argues 'American society ... doesn't aim at a finished or fully coherent Americanism. Indeed, American politics, itself pluralist in character, *needs* a certain sort of incoherence.' As such, ethnic particularism or hyphenated identities do not undermine national citizenship and are, in fact, *part* of American identity. Add to this the many behavioural studies on public opinion and normative conceptions of American belonging (Bonikowski and DiMaggio 2016; Citrin, Reingold, and Green 1990; Schildkraut 2007; Schwartz et al. 2012; Sides and Citrin 2007; Transue 2007; Theiss-Morse 2009; Wright, Citrin, and Wand 2012), and the evidence strongly indicates there is no single model of what it means to belong.

Given the inherently blended and oftentimes ambiguous nature of American citizenship, how can we systematically map continuity and change, the predominance of certain themes versus others, or indeed the hybridity of citizenship – the overlap of models – over time? Imposing a deductive approach on texts, in which words or themes are pre-coded as ‘liberal’ or ‘republican’ or ‘ethnocultural’ may miss the nuance of word co-appearance or symbolism of reference. Discerning the presence of different citizenship philosophies instead requires an unsupervised, inductive approach, paired with interactive textual analysis. Starting from a fixed point (the period of Americanisation) and studying one civic organisation over time (the D.A.R.) offers controlled research design for tracking imputations of citizenship over time. When are some items of American identity emphasised over others? Does periodisation emerge, and does it correspond to political change and historical events?

The next section provides context for the examination of American citizenship in the twentieth century and the selection of D.A.R. manuals, by situating the analysis in the period of Americanisation in the 1920s – the first attempt by civic organisations, political institutions, and employers to impute citizenship norms for immigrants at the mass scale. It is a rich and necessary start point for tracing continuity and change in the decades that follow.

### Americanisation in the 1920s

The Americanisation movement (late 1910s–mid-1940s) was a nationwide effort of the Progressive Era to assimilate the millions of recent immigrants into American society and its labour market. Almost 10 million immigrants came to the US in the first decade of the twentieth century alone, mainly comprised of immigrants from Southern and Eastern Europe. They largely settled in ethnic enclaves, and most did not speak English. Speaking of these non-English speaking ‘foreign born whites,’ as stated in the *American Journal of Sociology* at the time, ‘but a fraction over 1 per cent were undergoing any systematic training in the rudiments of Americanization’ (Hill 1919, 611).

Susan Martin (2010, 124) describes Americanisation not merely as a substantive shift in immigrant needs, but reflecting a change in competence for the state on the question of identity promotion: ‘Believing that the country had outgrown the organic, self-regulating rhythms upon which laissez faire America had relied, the Progressives saw the assimilation of immigrants as a matter of public policy.’ In 1905, English literacy became a requirement for citizenship, as a first step toward promoting assimilation among new arrivals. In 1913, Congress ramped up assimilationist efforts by creating an independent bureau for the naturalisation service, whose central remit was to promote citizenship and civic education, and held separate from the task of regulating immigration (which became its own distinct bureau, until they were merged in 1933).

Citizenship programs were first developed by the Bureau of Naturalization in 1914, the purpose of which was assimilation and orientation (Gordon 2007, 372–373). The Bureau published its first Federal Textbook on Citizenship in 1918 to prepare naturalisation applicants<sup>6</sup>, and its Education for Citizenship program distributed textbooks to public schools offering citizenship education classes. To keep up with demand, immigrant education was often offered at public schools at night, so as not to interfere with the workday.

These courses were not the only way in which immigrants learned to ‘become American’. In addition to citizenship classes offered by the Bureau, the Department of Education’s Division of Immigrant Education also joined in the Americanisation

movement. For example, the D.E. Sicher Company of New York City (a muslin manufacturer) began to offer English classes in cooperation with the New York Board of Education. Industrial plants would also take up the task on their own. The Ford Motor Company plant in Detroit, Michigan famously ran the 'Ford English School' (Loizides 2007). This educational pivot – not coincidentally – also led to an increased role for states and municipalities, which until 1914, had been described as 'meager' (Hill 1919, 619).

This reliance on municipalities and public education, civic and labour organisations, as well as employers, was by design. Schools, libraries, civil society, industrial plants, and other organisations were the *laissez faire* delivery mechanism for immigrant education. As such, the Bureau of Naturalization came to rely 'on non-governmental agendas (mostly staffed by volunteers) in public schools, clubs, and civic organizations' (Schneider 2001, 60) to deliver civic education, through handbooks and classes.

Education was seen as 'the great equalizer' in giving 'immigrant access to American society' (Martin 2010). Noah Pickus (2007, 86) details, pointing to both the Bureaus of Education and Naturalization, how educational programs

stressed that, above all, immigrants must undergo a psychological transformation of devotion from their traditional ethnic identity to America's civic ideals. These programs sought to sidestep the tensions between individualism and nationalism by seeking to engender broad changes in attitude rather than the adoption of specific cultural attributes or ideologies.

And, during the height of the Americanization Movement, several government agencies (Martin (2010, 123) identifies at least six!<sup>7</sup>) played a direct role in either providing language classes, promoting English, or supporting local organisations with information and resources.

The popularity of Americanisation courses should not be underestimated: In Los Angeles, fifty percent of naturalisation petitioners attended these courses (Pickus 2007, 99) and, in 1920 alone, citizenship textbooks reached 98,958 immigrants (King 2009, 88). Immigrants had several motivations to complete the course: they demonstrated an effort of assimilation (an important signal for neighbours, employers, etc.) and participants received a certificate of completion, which served 'as proof to naturalisation judges 'that the applicant was attached to the principles of the Constitution' (Pickus 2007, 98). In other cases, employers offered inducements and pressure to attend classes – 'You are expected to attend the Ford English schools' (Hill 1919), sometimes made attendance mandatory, or promotions and jobs contingent on obtaining citizenship (Schneider 2001, 61).

Restrictive escalation in the lead up to – and especially during – the first World War were reflected not only in immigration policy but in the tone of civic education. First, the stock of immigrants changed significantly. The Immigration Act of 1917 established a literacy requirement for immigrants entering the country and halts immigration from most Asian countries. The practice of conferring citizenship also became more restrictive, as the speaking requirement was extended to include general literacy, namely reading and writing skills (Higham 2002, 203). The 1923 Immigration Act then severely curbed entry based on nationality quotas. The law favoured immigrants from Northern and Western Europe, severely curtailing Southern and Eastern Europe and completely excluding immigrants from Asia.

In terms of the tenor of Americanisation, civic education became 'part of a larger effort to propagandize Americans into supporting a war that caused deep misgivings' (King



2009, 237). Pickus (2007, 121) describes this tonal shift as one of Americanisation by ‘conversion’ to one based on ‘coercion.’ Or, as Martin (2010, 14) elaborates, ‘an emphasis on helping immigrants overcome barriers to full engagement in American society’ gave way ‘to a coercive ideology that saw the unassimilated immigrant as a danger to the country.’ In this context, nativist attitudes increased precipitously. For example, Fouka (2019) documents how discrimination was a strong motivator of assimilation at this time, evidenced by German immigrants Americanising their names (as well as their children’s names) and filing more petitions for naturalisation. The trade-off to accepting immigrants (even a modicum) was increasing surveillance in the form of immigrant (‘alien’) registration and encouraging firms to tie integration and language acquisition to employment (Pickus 2007, 107–123).

It is in this context that we locate the first efforts by the D.A.R. to issue and disseminate citizenship handbooks for the new immigrant. The D.A.R. traces its Americanisation efforts to 1910<sup>8</sup>, and published its first, 8-page pamphlet in 1912, titled ‘Guide to the U.S. for the Immigrant Alien,’ or as it became known – ‘The Little Green Book.’ According to the Proceedings of the 21st Continental Congress of the D.A.R. (Washington, DC, April 15–20, 1912), the Connecticut D.A.R. began raising funds in 2010, and by 1912 paid \$5,000 to adapt and purchase the copyright of John Foster Carr’s *Guide to the United States for the Italian Immigrant* (‘*Guida*’), ‘in which they have been interested for several years’ (DAR 1912: 340). President William Taft, upon receiving a leather-bound vellum edition, wrote in thanks that ‘I am told that it is one of the most useful books published – Senator Dillingham, Chairman of the Immigration Committee, says so, and he ought to know’ (DAR 1912: 342).

The organisation’s first authored text, titled ‘Manual of the United States For the Information of Immigrants’ (referred to simply as the ‘Manual’) was published in 1921, with the stated purpose ‘to aid and assist [the immigrant] in establishing your future life among us, in order that you may receive the best our country has to offer.’<sup>9</sup> Moreover, the manual also initially sought to ‘establish better relations between ourselves and the strangers within our gates,’ self-acknowledging the D.A.R. as ‘among the first to put into practice an attitude of friendliness toward them in place of the almost hostile attitude of aloofness and mere commercialism which has too often characterized America’s treatment of them in the past.’<sup>10</sup> Later volumes suggest the manual to be ‘of great practical use in learning about our country, the opportunities it offers you, its form of government, and how to become patriotic citizens.’<sup>11</sup>

Substantively, the D.A.R. manuals of the Americanisation period bear resemblance to other manuals and textbooks at the time, so much so that repetition was a central concern of D.A.R.’s Immigrant Manual Committee (DAR 1921: 132). Indeed, early manuals covered similar topics to the syllabi of the Massachusetts and New York State Departments of Education, with sections on how the citizen supports themselves (food, clothing, water), what the community offers (fire, disease, accident), work, the country (history, growth), and ideals of citizenship (Hill 1919). Irrespective of similarities, the Bureau of Naturalization endorsed D.A.R. manuals, evidenced by bureau stamps of approval and forwards by US Presidents. Necessarily, there was a similarity of mission during the Americanisation movement. The D.A.R.’s central concern was not the uniqueness of content, but distribution. The Manual was sold at cost to ‘all educators, teachers or chapters desiring it for text-book use’ but also widely distributed by the chapters for free to immigrants

across the country, including at Ellis Island (DAR 1922: 155). It introduced the concepts and content of American citizenship on Day 1 and not, say, at the point of employment or naturalisation.

In sum, despite its racist history and ethnocultural reputation, its Americanisation materials were consistent with those of civic, industrial, and political actors of the day, including the Bureaus of the federal government. Ethnocentrism was a structural feature of US immigration policy in this period, thus, its exclusionary positions and practices were not atypical of the time.

Finally, unlike some of these other organisations – including the federal textbooks but also industrial materials like Ford Motors<sup>12</sup> – D.A.R. not only exhibits manual updating during the twilight of Americanisation, but for the half-century that follows, captured in 27 unique documents overall. The manuals' continued publication over a 70-year period (1921 -1996) is a particular strength, especially since many historical studies of American identity – including Smith (1999) and Pickus (2007) – stop after the Progressive Era. The archives of D.A.R. manuals also extend beyond the production of federal textbooks (Wan 2014), which ceased being published in regularity in the early 1940s.<sup>13</sup> In sum, the D.A.R. manuals are the longest continuing articulation of American citizenship by a singular voice.

D.A.R. manuals ended up in the hands of millions of new immigrants *qua* potential citizens. There is a drop-off in circulation in later years, as the D.A.R. declines in reputation and civic organisations, in general, become eclipsed by a growing role of migrant networks, churches and community organisations in integration and citizenship preparation (Portes and Rumbaut 2006; Waters and Jiménez 2005; Bloemraad 2006a). But they were a well-regarded civic 'field leader' during Americanisation, making their manuals a representative starting point for tracing changes in citizenship over time.

## Data

The D.A.R. citizenship manual corpus contains 44 documents in total, of which 27 are unique (as a number of editions are exact replicas of the previous manual in which only copyright, phraseology, spelling or population adjustments are made). Each manual begins with an introductory letter by the D.A.R. manual committee chair or president and includes materials on naturalisation, as well as a copy of a resolution, 'American Creed' by William Tyler Page. Beyond this standard introduction, manuals vary substantially in content, length, and specificity over their production timeline. In fact, in the first year following its initial publication, D.A.R. state chapters were already proposing amendments to the new edition of the Immigrants Manual (DAR 1922: 211). I only include English language text in this corpus, though several foreign language translations were printed over time.<sup>14</sup> In the first year alone, it was immediately translated into Spanish and Italian, followed by Hungarian, Yiddish, and Polish.

## Method

To examine the content of DAR citizenship models, I employ tools from the field of computational text analysis. Specifically, I pass a Latent Dirichlet Allocation (LDA) model (Blei, Ng, and Jordan 2003) over the corpus of text to identify general topics. This method unpacks

a document collection into groups of words that represent main topics. In practice, an LDA model describes each document as a series of topics (the number of topics is assigned by the researcher), lists informative words that characterise each topic (the number of output words is also assigned by the researcher) based on word count and word co-occurrences, and reports the frequency of those word collections over the document corpus.

While D.A.R. manuals are already organised by general subject (e.g. The Constitution, How to Become a U.S. Citizen), topic modelling enables the identification of issues or patterns that may not be readily discernible, specifically across and within subjects. In fact, one of the strengths of this type of unsupervised method is that it sets aside expectations of structure and provides an alternative way to examine the text, permitting the researcher to infer document organisation and topic clustering based on probabilistic patterns and grouping.<sup>15</sup> An unsupervised topic modelling approach is also appropriate given the nature of the documents, which present a mixture of topics where ‘each word is conditionally independent given its topic’ (Lucas et al. 2015, 261). While this means we cannot impose citizenship philosophies as topics, we can construct a conceptual map of topics post hoc that either align or deviate from citizenship norms defined by liberalism and civic republicanism.

After preprocessing the texts,<sup>16</sup> I analysed them using MACHine Learning for Language Toolkit, or ‘MALLET’ (McCallum 2002). Mallet is a Java-based package for statistical natural language processing and topic modelling. It outputs topics, which consist of a cluster of words that frequently occur together. Again, the number of topics and words per cluster is pre-defined by the researcher and is independent of factors like length or number of documents. Discerning the coherence or differentiation of topics requires researcher discretion. For example, a model may be implemented to produce 20 topics, but not all topics may be coherent, resonant, or distinct (e.g. four topics may be produced which tap into the same theme).

## Results

**Table 1** presents an output of 20 topics from across the corpus of citizenship manuals, that is, across all D.A.R. manuals between 1921 and 1996.<sup>17</sup> The model was specified to identify 20 unstemmed words per topic to obtain refined differentiation and passes over the documents 200 times.<sup>18</sup> Neither the topic’s assigned number nor the combination of words per topic is based on frequency, i.e. they are random and exchangeable, based on co-appearance, and may change with replication. Each of these topics need not be unique, and several topics might cover the same subject (especially if that topic is a dominant theme of the text, e.g. naturalisation of an individual versus a family member).

The probabilistic topic model produces word clusters that run across the corpus of documents. Topic labels were added by the researcher. For this, there are several strategies for identifying coherent topics from raw output, including posthoc manual labelling based on domain knowledge and subjective interpretation (e.g. Wang and McCallum) or selecting root words per topic to instruct topic assignment (Chang et al. 2009; Boyd-Graber and Blei 2009). Unlike the use of topic modelling to identify topics across a newspaper corpus (see for example Grimmer and Stewart 2013), where the objective is to identify topics among unsorted text, the citizenship manuals here are already confined to a general subject area – citizenship. As a result, many of the word groupings would otherwise appear indistinguishable if not for expert-identified context. Therefore, I follow Boyd-

**Table 1.** Topic labels based on word clusters.

No.	Topic	Word clusters
0	Information	Government country make constitution pay large find give information speak American office state great citizens jersey time license principal
1	Naturalization	Citizen constitution government united state flag naturalized general naturalization September property department money private filed make honor man alien
2	Laws (history)	Laws people immigration union make land live Washington adopted revolution state children protect person George representatives file clerk stars
3	Naturalization	Made liberty certificate papers states application intention rights fee date life citizenship married congress entry months husband carried community
4	Work	States united English money children person number Pennsylvania women lawyer agricultural schools life city home men day friends industry
5	Naturalization (family)	States united made office naturalization application period person parent order marriage amendment means parents child economic prior examiner work
6	Laws	United law alien displayed government order flag workingman paper states great country protect arrival woman half countries earnings respect
7	Information, acquiring	Flag rights liberty country form information nearest branch work English vice local examiner office nation community principles united requirements
8	Courts	America court united power courts foreign colonies service governments year good allegiance hearing defend settlement god part states pledge
9	Symbols (history)	Flag states staff England America war revolution love laws flown salute flags protects national passed white stands American employer
10	Work	School public good laws people citizen united evening town Illinois savings sign understand clerk railroad wages parts employer family
11	Values (freedom)	American declaration free nation applicant states national country thirteen place English elected principles sign powers cases daughters kind citizens
12	Values (liberty)	Law states people rights liberty years free service persons country men order oath political time independence flag fought provided
13	Government	Government freedom applicant petition congress amendment citizen president required citizens king vote system bill justice war society jury faith
14	Symbols	States American office general years national citizenship public honor stripes purposes obey star president true assembly home including apply
15	Government	United naturalization government made constitution independence president colonists time congress states house senate period great john white born chief
16	Naturalization	States united naturalization application service citizen year absent permission naturalized person years called forces part physical persons examination filed
17	Naturalization	Naturalization united petition years form citizenship residence country men required time witnesses women woman permanent colonists people home citizen
18	Symbols	State people government England flag form residence great states witnesses citizenship god secretary life admitted love party equal constitution
19	Work	State learn work farm live teacher York read department Ohio property private states citizen insurance papers books free trouble

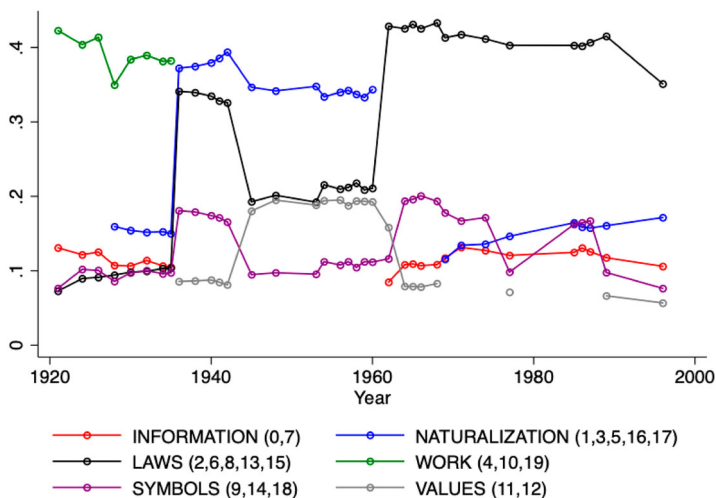
Graber and Blei (2009) by manually labelling topics based on root words, as the citizenship manuals have a nuanced and limited vocabulary. As an example, in earlier documents, the word ‘Ohio’ does not simply refer to the state but rather is a specific reference to a location of growing industry and place where an immigrant might successfully find a job in manufacturing. This makes ‘Ohio’ a reference to labour, not state rights or history. To illustrate further, topic 4 is labelled ‘work’, though the word ‘work’ does not appear in the word cluster. The order of the words per topic does not signify importance or weight, so in moving between word and text – e.g. looking where discussions of money, children, Pennsylvania, lawyer, and agricultural were located – these largely cohere around the theme of work as a means of advancement and support (i.e. familial care). This reflects – and is validated by – early D.A.R. manual structure, which contains a section titled ‘Finding work’ alongside other topics.

All word clusters presented in Table 1 are populated with patriotic and historical vocabulary, which presents a challenge for distinguishing between topics. However, using the

previously described, iterative approach, we can discern several topics. First, naturalisation procedures are a dominant theme, as captured by several topics (1, 3, 5, 16, and 17). This reflects the central focus of manuals as a preparatory device for naturalisation, as well as the inclusion of up-to-date rules for naturalisation per manual. Most other topics cover basic political institutions in history, including government (topics 13, 15), laws (topic 2), symbols (topics 9, 14, 18), and values (topics 11, 12). These are not mutually exclusive categories. It is clear through both a close reading of these sections and in the grouping of words that history is a proxy for understanding core values: words like ‘flag’ and ‘revolution’ are paired with ‘love’ and ‘laws’ (topic 9) and ‘independence’ and ‘fought’ appear alongside ‘rights’ and ‘liberty’ (topic 12). We also see other topics dedicated to conditions of work (topics 4, 10, 19) and courts (topic 8).

Grouping similar topics together and plotting frequencies over time, then, [Figure 1](#) presents the prevalence of grouped topics between 1921 and 1996.<sup>19</sup> This figure reveals four distinct periods of manual content: 1921–1935, 1936–1942, 1945–1960, and 1962–1996. Topics regarding immigrant work, including labour, education, care and information (topic 0) dominate until 1936, when we see a dramatic change in emphasis on naturalisation, laws, and symbols. There is further differentiation as we move to the post-WWII period, where the discussion on values increases dramatically and inversely to symbols. The fourth and final grouping emphasises civic knowledge, focusing on law and symbols with little attention to practical information regarding naturalisation.

This periodisation – derived from an inductive topic model – maps on to trends in immigration and American citizenship, where, for example, the values clusters surge in the context of postwar McCarthyism that positioned ideology as a core dimension of American citizenship. It may also reflect organisational change and relevant. Revisions, leadership change, generational turnover, as well as decreasing price of manuscript production with technological innovation may all play a role in when and how manuscript revision took place.<sup>20</sup> Cost was a constant concern, as distribution was free to immigrants (schools and educators paid cost for copies) and translation was costly. Further, as



**Figure 1.** Frequency of topics over time (1921–1996).

D.A.R.'s influence receded in a post-Civil Rights era, manuals became less distributed and, by the 1990s, became available online. This atrophying status is aptly captured in the relatively little change we see in the documents of the late 1960s onwards.

But do these trends convey information about citizenship ideals? Is there evidence of the multiple traditional hypothesis, that liberalism and civic republicanism are overlapping and dually present in American citizenship? In other words, can we match inductive, unstructured topic models to the political traditions of liberalism and civic republicanism? Recall liberalism is primarily defined as a rights-based status while civic republicanism orients the individual toward duty and the public good. As such, indicators of the former may include respect political institutions; pursue economic success through hard work; let people say what they want even if you disagree (tolerance). Indicators of civic republicanism may include volunteer or work, as well as identarian dimension, such as thinking of oneself as American or feeling American, as well as being informed and involved.

Based on these definitions, we can see some patterns between the unsupervised topic model output and political traditions. For example, we see a strong liberal narrative where the manuals emphasise naturalisation and laws (consistent with an understanding of liberalism as a respect for institutions), represented especially in the second and third period. We also see civic republicanism, where emphases on supporting yourself and your family and the importance of understanding national symbols and values are consistent with indicators of feeling American, as well as being informed and active. Of course, this type of duty needs to be contextualised. It was never the intention of the leaders of the Americanisation movement that the working class, much less immigrants, become politically active. Rather, their 'duty' was assimilation, which was achieved by learning English, work, and providing for one's family. Further, the obligation to achieve 'economic success through hard work' can, from one perspective, be a liberal ideal; a manifestation of achieved autonomy. On the other hand, one may also define community-oriented duty as economic self-sufficiency. This is not inherently problematic – Smith (1999) acknowledges liberalism and civic republicanism are not mutually exclusive ideals – but does reflect certain limitations of using non-discrete philosophies for coding rules. It is also a reminder that an unsupervised topic modelling, which does not make use of an imposed conceptual structure, may produce word clusters that do not fit a priori theorisation. Therefore, complementary textual analysis is required to interpret this descriptive evidence for assessing the multiple traditions hypothesis, where tonality and context allow for a greater understanding of the manuals' intent and how content of American belonging can change from one period to the next.

Taking up this task, the next section employs complementary textual analysis to explore these topics and periodisation further. I identify multiple traditions present in manual content, how citizenship philosophies wax and wane in correspondence to historical moments in US history, but also how topics continue over time, particularly civic values.

## **American citizenship across four periods**

### ***Multiple traditions during Americanisation (1921–1934)***

Alongside a strong, liberal emphasis on 'knowing the law' and other democratic principles, the unambiguously dominant theme in early manuals is 'citizenship through behavior,'

where ‘good citizenship’ is specifically defined through good habits.<sup>21</sup> This definition connotes duty as personal service, i.e. self-improvement through work and acquiring education, as well as taking care of your family, which stands in contrast to a contemporary definition of duty, e.g. participatory democracy. In [Figure 1](#), the cluster labelled ‘work’ includes subject matter on work, education, and family care, and over 40% of manual content at the time. In other words, ‘dutiful citizens’ during this first period were informed and active self-improvers and ‘feeling American’ was a deliberate byproduct of that process.

While this interpretation of civic republicanism is certainly different from later articulations, where volunteer work and community ties are meaningful, it nonetheless represents an early notion of citizenship-through-behaviour, where behaviour was interpreted as a personal duty, as opposed to merely citizenship-by-right. This interpretation of early civic republicanism is consistent with [Pickus \(2007, 7\)](#) description of early Americanisers’ goals, in which he describes both ‘cosmopolitan pluralists’ and ‘new nationalists’ as wanting ‘immigrants to participate in the public life of their new country and, in doing so, help revitalize citizenship.’ Beyond content, even the structure of assimilation connotes republicanism, in which attending citizenship courses, the act of acquiring information through handbooks, and literacy learning in particular ‘were used to cultivate a certain kind of [good] citizenship in new immigrants’ ([Wan 2014, 38](#)), namely a citizen that disciplined into a compliant labour force.

As such, and in contrast to later manuals, the first subject discussed in the early manuals is not patriotism or even naturalisation, but ‘finding work’ and understanding labour laws. Information was dispensed about specific job opportunities, detailing farming (and how to be watchful for accurate land title), manufacturing, and mineral production. Farming, in particular, ‘offers an excellent opportunity to make a good living for yourself and family’ because ‘work at good wages can generally be found in the cities’ but ‘frequently this work is temporary.’ As such, the manuals also encouraged settlement outside cities, i.e. ethnic enclaves of other foreign-language speaking immigrants.<sup>22</sup>

Even an understanding of general law is coloured by this emphasis on work. For example, the section ‘The Constitution and the Workingman’ describes that

it not only protects him in his personal freedom and his political rights, it assures to him the full and regular payment of the wages he contracts to work for. It protects his savings. It guards his home. It respects and protects his family life.<sup>23</sup>

In early manuals, it continues that ‘[the Constitution] shall protect you while you are climbing according to the rules of honesty and fair play; but you must climb by your own power, with your own legs and hands and brains.’<sup>24</sup> This reading not only asserts American values, but also combats competing ideologies, a particularly worrisome subject to the D.A.R. in the years leading up to WWI.<sup>25</sup>

Information acquisition is another prevalent topic in this first period. This ranged from finding a doctor to purchasing a railroad ticket,<sup>26</sup> but, by and large, was about the interdependent objectives of English literacy and – again – finding work:

It is very important that you learn [English]. You will need it to obtain work. You will need it in order to understand instructions given you by the men for whom you work. You must be able to read English to understand signs and warnings of dangers. You can then do your work better, more easily and more safely. You may be able to obtain better positions and higher wages.<sup>27</sup>

The ‘informed’ and ‘active’ citizen also acquires English for socialisation and naturalisation. In fact, the manual suggests ‘If there is no school [to provide English], get a number of your friends to sign a petition for a night school. Take the petition to the superintendent of public schools. He may be able to start a school.’<sup>28</sup> This promotes a clear duty in activism and individual accountability. Moreover, obtaining English was not only about finding work but also about assimilation and prestige:

Your children will respect you more highly. They learn about America in school. They will think that they know more than you, their parents, if you do not learn to speak English. They will not obey you if they do not respect you. Your children will want you to be like Americans. You yourself would be glad to be able to talk to Americans. When you cannot speak to them you feel ashamed.<sup>29</sup>

This content is similar to federal textbooks at the time, which focused ‘less on knowledge of federal bureaucracy and more on cultural aspects of citizenship and civic behavior’ (Wan 2014, 50).

Through English literacy and steady work – all defined as parts of being a ‘good citizen’ – the immigrant could engage in the ultimate citizenship practice: active political participation as a member of a Republic. ‘The vote is the greatest gift that citizenship gives you. It is the most sacred right of a free people.’<sup>30</sup> Other practices (defined as ‘obligations’) of citizenship range from accepting jury duty, paying taxes, bearing arms in service of the United States, to other behaviours like not ‘throwing papers and rubbish in the streets or public parks,’ obeying the law, courts, ‘guarding the flag,’ and being ‘useful and loyal to your town, city, or little community, to your State, and to the Nation.’<sup>31</sup> Thus, the personal duty to integrate through work and assimilation was the first act of ‘good citizenship.’ While an active working class made up of culturally ‘foreign’ citizens might have been the last thing the Progressives wanted,<sup>32</sup> this traditional interpretation of civic republicanism was clearly contingent on a preceding process of full assimilation. And despite the D.A.R.’s ethnocentric reputation, we see little in terms of explicit references or word co-occurrences regarding culture. One possible reason this may be the case is that immigration rules pre-selected out ethnically-undesirable immigrants to begin with.

### *Liberal democratic emphasis in a period of low immigration (1936–1942)*

In the twilight of Americanisation, there was a mid-30s content shift from work (the ‘good citizen as the productive citizen’) toward a more legalistic and procedural depiction of citizenship. Looking back to [Figure 1](#), we see ‘support’ and ‘information’ clusters drop out entirely. In their place, new dominant clusters include naturalisation (topics 1, 3, 17; comprising in sum an average of 38% of manuals), law (topics 2, 6), and a new topic on courts (topic 8). In place of discussions of citizenship rights and duties, manuals begin to include drier legal texts and rules that regulate naturalisation, including sections for women and veterans of WWI. In this, we see a predominance of liberal democratic values, centred on institutions, laws, and symbols of freedom (covering approximately 18% of manuals in this period). Thus, if immigration and demographic change along with the particular ideological threat of Bolshevism impelled an early emphasis on ‘assimilable’ immigrants (i.e. from Europe), the absence of both – exacerbated by rampant job loss during the Great Depression – led the manuals to shift in content.



In thinking contextually, we can see how a topic model does not pick up ethnocultural preferences but how practices can. Following the 1924 Immigration Act, immigration became severely limited through a national origin quota. Specifically, immigration visas were limited to two percent of the total number of persons of each nationality according to the 1890 census. This effectively barred immigration from Asia and, according to the US Office of the Historian website, was designed to ‘preserve the ideal of American homogeneity.’<sup>33</sup> As reflecting these immigration preferences, Chinese was not among the 17 languages in which early D.A.R. manuals were printed.

This raises a larger point about the advantages and disadvantages of an unsupervised machine learning and topic models. Since we do not impose a concept framework for analysis, it can only pick up word clusters. In missing intonation, nuance and subtext, it necessarily misses implied philosophies, like ethnoculturalism (‘US as a nation of white Protestants’) or, in later years, incorporationism (‘US as a diverse nation of immigrants’). This is not to say these themes did not play a prevalent role in American citizenship, just that they are not picked up in the topic model and, thus, require additional methodological techniques like textual analysis.

### *Postwar, value-based patriotism (1945–1960)*

Unsurprisingly, this third period of manuals sees a growth in references to postwar liberal democratic values. A new quote by President Harry Truman at the beginning of each manual orients the reader to the virtues of liberal democracy and the importance of preserving American institutions: ‘One thing we have learned now and should never forget is this: That a society of self-governing men is more powerful, more enduring, more creative than any other kind of society, however disciplined, however centralized.’<sup>34</sup> Looking back to [Figure 1](#), the emphasis on naturalisation law continues from the previous period, but the importance of legal knowledge declines deprecably as the emphasis on values doubles to almost 20% of total manual content.

The manual opens with a new section, titled ‘Growth of Freedom,’ which traces the American project of individual liberty and democratic rule all the way back to the Teutons. It expressly discusses John Locke, who said that ‘government must see that every man had his liberty, the right to his life and to his property, provided he kept within the law.’<sup>35</sup> There is also an increased emphasis on symbols that encapsulate the essence of liberty and freedom. Alongside existing sections on the treatment of the Flag (‘Old Glory’) and the American Creed, new sections discuss Independence Hall, the Pledge of Allegiance, the Great Seal, the Liberty Bell, and the Statue of Liberty. The Declaration of Independence is also included for the first time in full. Moreover, alongside a full version of The Constitution was included an expanded discussion that describes its contents in plain language. This new emphasis is apparent in the topic model; during this manual period, the topic of liberty (topic 12; grouped in the ‘values’ cluster of [Figure 1](#)) first appears and accounts for almost 12% of total manual content.

In terms of duty, postwar manuals include a section on citizenship obligations and responsibility (recall that this appeared in the initial manuals but ceased in 1935). Unlike the first period, however, this is not about behaviour nor work habits but the duty of ideological commitment.<sup>36</sup> Addressing the citizenship applicant directly, it states: ‘Remember this: You are not Italian-American. You are not a Spanish-American.

You are not a German-American, nor any other hyphenated American. You are an American.’ The selection of these nationalities is not by accident. Other changes also reflect new, war-inspired attitudes toward Axis nations. For instance, the immediate, post-war reference to ‘Christopher Columbus, the Italian’ was simplified to just ‘Christopher Columbus.’<sup>37</sup> This is the only mention of diversity. The manuals make clear that the obstacle to integration is not illiteracy and idleness (height of Americanisation) nor ethnic diversity (later years of Americanisation), but ideology.

Perhaps the clearest expression of a liberal democratic core to American citizenship is included in the discussion titled ‘-Isms are not American.’ To quote:

From the very beginning of this nation there have been groups that have tried to change the form of government. In order to prevent such a disaster it is necessary to understand what the government of the United States has to offer its people, and compare this with the various ‘isms’ that wish a change. Communism, Socialism, Fascism, Naziism [*sic*], – none of these belong to the United States of America. Each of these ‘isms’ is the result of defeat. All of them would put an end to the people’s liberties.<sup>38</sup>

This section continues with an expanded discussion on the American political and economic systems, noting that liberal democracy and capitalism ‘allows the people the freedom that means happiness and prosperity.’<sup>39</sup> Finally, it draws a direct line between the original immigrant pioneers of the United States and the immigrant reading the manual: ‘To them it is entrusted the task to keep this nation free from all ‘isms’ that may threaten the form of government that has brought more freedom to its people than could have been found under any other system in the world.’<sup>40</sup>

The emphasis on liberal democratic principles eclipses all other themes. Citizen duties primarily emphasise knowing your rights and voting (‘Governments do not preserve themselves. They can be preserved only by the vigilance of those to whose guardianship they have been committed’<sup>41</sup>). In other words, it emphasises a citizen who is aware of rights and rules. The manuals also begin to include potential questions for the citizenship exam, serving not merely as an aid of integration but as a deliberate study guide to assist political incorporation. Unlike the ‘informed citizen’ promoted in the manual’s earliest editions, there is only one mention of education, defined as a ‘right of the people of this Republic’ in which the ability to ‘read and write English well will help you to get on better in business and will make you more independent.’<sup>42</sup> Thus, if there are traces of republicanism in this third period, it has been redefined so that the ‘good citizen’ is reinterpreted by different expectations.

### ***A return to multiple traditions (1962–1996)***

Following the strong patriotism and liberty-based themes of postwar manuals, editions in the 1960s onward reflect a type of stasis to both American citizenship and the D.A.R. manual project. Revisions over time become less about tone or historical moments and more about fact. This signifies a general shift in manual purpose, from painting a picture of civic meaning through knowledge and into a reference manual, where the immigrant infers significance for themselves. In this shift, we also observe a stark decrease in the influence of the D.A.R. in disseminating information to immigrants.

While an emphasis on liberty and values drops precipitously back to 1930s levels (approximately 8% of topic coverage), liberalism remains prevalent through emphases

on knowledge of the law (comprising over 40% of coverage) and symbols of freedom (20% of coverage; e.g. 'see the Liberty Bell, the symbol of the freedoms, rights and opportunities of all native-born and naturalized Americans.'<sup>43</sup>). Thus, while liberalism remains a steadfast ideal of citizenship, it changes in terms of content.

The topic model reveals a second pattern: while it points to liberalism making up nearly 70% of all manual content in this period, we also see a modest presence of civic republicanism. Beginning in 1962, we see the first real emphasis on civic participation. There is a new section on local government included alongside federal and state discussions, emphasising that 'Every man and woman should be proud to know that he or she has a share in the government of his community. Each one should try to prepare himself to take an honest, active part in the management of his town or city or county.'<sup>44</sup> We see this reflected in topic 7, titled 'information' which contains 'community' and 'local.' This represents a new topic from 1962 onward, and on average covers 11% of manual content.

This concurrent trope of civic republicanism is even more evident in pairing the topic model with textual analysis. Manuals define themselves as 'given free of charge as a help to YOU to be a GOOD AMERICAN CITIZEN.'<sup>45</sup> In other words, 'a good citizen is an informed citizen.'<sup>46</sup> Further, a section called 'The Responsibilities of Citizenship' emphasises the need to 'study, read and learn as much as possible about the United States, its government, its people and its way of life' as well as 'live in a way that will uphold American ideals and show others how to live in the same way.'<sup>47</sup>

Active citizenship is highlighted particularly as a bulwark against Cold War ideology. It is the responsibility of all citizens to 'learn to recognize un-American propaganda when you see it, hear it, or read about it'<sup>48</sup> and 'As an American, learn why you should speak out against such propaganda.'<sup>49</sup> This is distinct from the ideological emphasis of the previous period, as it promotes active behaviour in combating propaganda. In other words, citizenship values must be vigilantly guarded. Despite the prevalence of these themes in the text, these dimensions of civic republicanism – informed and active participation – are weakly detected in the topic modelling. This is likely because they employ a similar vocabulary as other sections. This is a tactile reminder of the importance of pairing methodologies.

Finally, consistent with previous periods, diversity and composition preferences cannot be gleaned from topic modelling or textual analysis, but practice itself. The D.A.R. ceases to supply manuals in foreign languages beginning in 1969. Manuals continue to be 'furnished free to the Naturalization Courts for their distribution to foreign-born who apply for citizenship, or for use in Americanism classes for the foreign-born,'<sup>50</sup> but their lack of distribution in Spanish begins to undercut their utility for a shifting immigrant population, where *braceros* that came to work in the US during WWII began to naturalise, and where the 1965 Immigration Act saw the use of national quotas on immigrants from Western hemisphere countries.

However, this change may not be an expression of ethnoculturalism *per se* but a reflection in the changing function of the manual and relevance of the organisation. While its basic purpose remained

to welcome and help those who wish to become American citizens attain that goal and understand its values ... The Manual is also used widely as a reference for study in schools and libraries, as well as in organizational work, especially among young people. To make this

information readily available to them is more important than ever, now that they must be ready to assume their responsibilities three years sooner than formerly, at age eighteen instead of twenty-one.<sup>51</sup>

As such, it starts to include general information such as lists of Presidents, states, and national holidays. And, as the topic model shows, coverage of naturalisation laws declines enormously from the previous period (from 35% to 17%). While we can only speculate as to the motive for decreasing the focus on immigrants with the evidence at hand, the cumulative backlog of immigrant applications, growing competence of the Immigration and Naturalization Service (INS) in directly providing information for the new civic exam, as well as the increasing role of migrant networks and grassroots organisations may have had the effect of ‘crowding out’ the D.A.R. Later, of course, the advent of the internet would make this sort of service obsolete, though the D.A.R. continues to revise its manual (e.g. update the list of US presidents) and hosts it on their website.

## Conclusion

An analysis of the D.A.R. manuals – through computational techniques and close textual analysis – reveals both change and continuity in the content of American citizenship over the twentieth century. Liberalism is prevalent throughout, but the century has also been bookended by periods of significant, duty-based civic republicanism. This republicanism never *replaces* liberalism; rather, these two ideals coexist and are layered. This supports a ‘multiple traditions’ narrative not only for the period of Americanisation, but also in more recent decades.

Even where we see continuity in tradition, the paired methods used in this study also illustrate how citizenship norms may vary within type. The liberalism pre-WWII, with its emphasis on laws and regulations, is not the same as postwar liberalism, where understanding the value and symbols of – and maintaining a commitment to – liberty became a centrepiece of identity. Moreover, these two periods of liberalism are distinct from the last period studied here, wherein the topic model charts a decline in an emphasis on liberty but a significant uptick in coverage on laws and symbols. Civic republicanism, too, varies over time. While duty is consistently defined as voting, the early 1920s also interpreted duty as work and information-gathering while toward the end of the century duty means civic participation at the local level. As such, civic republicanism has not come ‘full circle,’ rather we see a re-definition of the active, informed citizen for new times. In other words, context matters in how we interpret ideals of citizenship.

Methodologically, this paper has highlighted the utility of topic modelling in approaching archive material. It enables a finely granulated, inductive categorisation over a large corpus of text, sometimes identifying non-obvious topics across themes, e.g. courts. As such, topic modelling breathes new life into the role historical records can play in social science analysis, presenting researchers with an innovative methodological tool to re-examine old but enduring concepts like national belonging. Moreover, the consistency of source and frequency of manual production provides a fixed perspective for assessing a civil society view over time, triangulating and extending existing analyses beyond the period of Americanisation and creating a through-line between studies of early and late twentieth century identity.

However, passing a topic model over text only detects overt references and word co-occurrences, thus presents a picture of citizenship on paper, not practice. The topic model was unable to detect a strong presence of societal composition preferences, e.g. ethnoculturalism or incorporationism, making it an insufficient instrument for assessing a fuller spectrum of citizenship traditions. But, by considering the historical context in which these manuals were produced, we see ample evidence of an ethnocultural environment, e.g. the practice of ascribing U.S. citizenship at that time was not merely exclusionary but outright racist (as exemplified by the 1922 Supreme Court ruling in *Ozawa v. United States* that barred Japanese from naturalisation). And where we do not see evidence of incorporationism, this complementary approach raises the question of whether modern classification themes and theories are appropriate for certain historical periods. For example, Aptekar (2012) only finds evidence of pro-immigrant *qua* incorporationism in naturalisation ceremonies ('immigrant as morally superior redeemers of the American nation) in the most recent period of analysis (2003 onward), which is outside the scope of the present study, compared to messages of potential liability framing in the 1950–1970s (also see Schildkraut 2005).

Future research may build on these findings in multiple directions. One question is how much D.A.R. manuals match up to lateral comparisons, that is other civic organisations or federal textbooks at the time. D.A.R. provides the most consistent archive over time, but other industry-specific topics may be more prevalent in different civic organisation handbooks and curriculum. Additional comparisons with manuals produced by other civil society actors, where available, could enhance the validity of the periodisation identified here. These data could also be used to investigate the determinants of variation over time, ranging from internal institutional change (e.g. change of D.A.R. structure or leadership) to external networks and learning mechanisms. An additional avenue of research would be to compare citizenship content of the manual with public opinion, measured at various times, to assess the resonance of immigrant-oriented materials with larger public attitudes. Finally, these data could serve as a measure of citizenship content for larger analyses on immigrant incorporation or the evolution of patriotism, as examples.

Finally, on a conceptual level, this study illustrates through the American experience how citizenship is not only multilayered and malleable but also reactive, transforming in response to historical change to reflect both national ambition and insecurity. With this, we can interpret contemporary calls for renewed civic duty not merely as a strategy to offset democratic erosion (Levitsky and Ziblatt 2018), but as a reflection of the decline of obligation in American citizenship more generally. Likewise, we can use this insight to interpret citizenship change elsewhere, like in Western Europe, where states have rushed to present rigid definitions of citizenship through high cultural integration barriers (Goodman 2014). 'Good citizenship' is not simply a list of *desiderata*, but a response to perceived national problems.

## Notes

1. Dar.org (accessed February 20, 2017)
2. The D.A.R.'s first authored a manual in 1921, but they credit John Foster Carr's 'Guide to the United States for the Immigrant Alien' (1912) as the original. Carr was the Founder and Director of the Immigrant Publication Society in New York from 1910 to 1930, and also authored a similar book for the Jewish immigrant (1912).

3. 'For Daughters of the American Revolution, a New Chapter.' *New York Times*, July 3, 2012. As late as 1984, an African-American woman sued the Washington, D.C. chapter for admittance.
4. Department of Homeland Security (DHS). *2008 Yearbook of Immigration Statistics*. Washington, DC.
5. Contributions to these debates include famed treatments dating back to Tocqueville, and more recently Louis Hartz (1955), Seymour Lipset (1959), Gunnar Myrdal (1964), Arthur Schlesinger (1991) and Samuel Huntington (1981).
6. This textbook was compiled from materials used in public schools (primarily the Massachusetts Department of Education), and funded out of the Bureau's surplus revenues (Pozzetta 1991, 246).
7. Given this number, redundancy among federal agencies produced inevitable inefficiency (Hill 1919, 626–627).
8. <https://www.dar.org/national-society/education/dar-manual-citizenship> [accessed 23 March 2020].
9. Box 4, Manual 1, 1921, 2nd ed. Note: All archive references are labeled by Box and Manual Number, as well as Year (and edition where available).
10. Proceedings of the Thirtieth Continental Congress of the National Society of the Daughters of the American Revolution, vol. 29–30, 1920, 26.
11. Box 4, Manual 8, 1930, 6th ed.
12. There is no documentation for systematic analysis of the content of these courses (Hill 1919, 634).
13. The INS picked up the task to write a manual in the 1980s to coincide with the standardized naturalization test.
14. Versions in the D.A.R. archive include: Armenian, Bohemian, Finnish, French, German, Greek, Hungarian, Italian, Japanese, Lithuanian, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, and Yiddish.
15. (e.g., Grimmer and Stewart 2013)
16. First, basic editing (spelling corrections, de-hyphenating words split across lines) to correct of OCR transcription was applied. Second, for all content in citizenship manuals (excluding quoted text, such as the Constitution, American Creed, Star-Spangled Banner, Preamble to the Declaration of Independence, and lists, including that of Presidents, States, Capitals, post offices for filing naturalization paperwork and sample questions for the civics exam) between 1921 and 1996 was lowercased. Lemmatization was applied, and punctuation and stop words were also removed (Lucas et al. 2015).
17. This balances semantic coherence within topics and interpretable differences across topics.
18. In passing a topic model over the document in both stemmed (using porter stem library algorithm) and unstemmed versions, I ultimately proceeded with the unstemmed version where I found stemmed to produce too much noise. For example, the stemmed word 'state' could refer to the 'United States,' a specific state ('Pennsylvania'), a 'state'-ment of belief or purpose, a 'state'd rights, 'state' government, etc. There is also a choice taken into account for the number of topics generated. In comparing output of ten versus twenty topics, ten did not produce enough fine-grained difference, as the manual vocabulary can be ambiguous without sufficient context.
19. For this table, see Appendix. The top six topics and frequency are displayed. Using a threshold of .05, therefore, a number of additional topics are identified per year but are omitted from the table.
20. Proceedings of the Thirty-First Continental Congress of the National Society of the Daughters of the American Revolution, April 1922. Washington, DC, 211.
21. Namely literacy and work (Wan 2014, 42).
22. Box 4, Manual 1. 2nd ed.
23. Box 4, Manual 8.
24. Box 4, Manual 3, 59.
25. (Pickus 2007, 111; Higham 2002, 222).

26. Other examples include posting bail, banking, and discerning between good and bad lawyers. Box 4, Manual 8.
27. Box 4, Manual 2, 1924, 3rd ed.
28. Box 4, Manual 2, 1924, 20.
29. Box 4, Manual 3, 15.
30. Box 4, Manual 3, 1936, 4th ed., 90–91.
31. Box 4, Manual 3, 91.
32. Particularly ‘new nationalists’ who ‘excluded the possibility that non-whites could assimilate’ (Pickus 2007, 7).
33. <http://history.state.gov/milestones/1921-1936/ImmigrationAct> (accessed May 21, 2013)
34. Box 5, Manual 1, 1945, Intro.
35. Box 5, Manual 1, 1945, 9.
36. Ideological commitments are not included in Schildkraut’s operationalization. See Schildkraut (2005, 97)
37. Box 5, Manual 12, 1962.
38. Box 5, Manual 1, 1945, 42. This section last appears in the 1960 manual.
39. Box 5, Manual 1, 1945, 47.
40. Box 5, Manual 1, 1945, 47.
41. Box 5, Manual 4.
42. Box 5, Manual 4.
43. Box 6, Manual 3, 1966, p.15.
44. Box 5, Manual 14, 1962, 71.
45. Box 5, Manual 14, 1962, 8.
46. Box 7, Manual 5, 1985, 84.
47. Box 6, Manual 4, 43.
48. Box 6, Manual 4, 43.
49. Box 6, Manual 1, 1964, 87.
50. Box 7, Manual 5, 1985, 5.
51. Box 7, Manual 1, 1977, 8.

## Disclosure statement

No potential conflict of interest was reported by the author(s).

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## References

- Aleinikoff, Thomas Alexander, and Douglas B. Klusmeyer. 2002. *Citizenship Policies for an Age of Migration*. Washington, DC: Carnegie Endowment for International Peace/Migration Policy Institute/Brookings Institution Press, distributor.
- Aptekar, Sofya. 2012. “Naturalization Ceremonies and the Role of Immigrants in the American Nation.” *Citizenship Studies* 16 (7): 937–952.
- Blei, David M., Andrew Y. Ng, and Michael I. Jordan. 2003. “Latent Dirichlet Allocation.” *Journal of Machine Learning Research* 3 (Jan): 993–1022.
- Bloemraad, Irene. 2006a. *Becoming a Citizen: Incorporating Immigrants and Refugees in the United States and Canada*. Berkeley: University of California Press.
- Bloemraad, Irene. 2006b. “Becoming a Citizen in the United States and Canada: Structured Mobilization and Immigrant Political Incorporation.” *Social Forces* 85 (2): 667–695.

- Bonikowski, Bart, and Paul DiMaggio. 2016. "Varieties of American Popular Nationalism." *American Sociological Review* 82: 5.
- Bosniak, Linda. 2000. "Citizenship Denationalized." *Indiana Journal of Global Legal Studies* 7 (2): 447–509.
- Boyd-Graber, Jordan L., and David M. Blei. 2009. "Syntactic Topic Models." *Advances in Neural Information Processing System*, 185–192.
- Brubaker, Rogers. 1992. *Citizenship and Nationhood in France and Germany*. Cambridge, MA: Harvard University Press.
- Chang, Jonathan, Sean Gerrish, Chong Wang, Jordan L. Boyd-Graber, and David M. Blei. 2009. "Reading Tea Leaves: How Humans Interpret Topic Models."
- Citrin, Jack, Beth Reingold, and Donald P. Green. 1990. "American Identity and the Politics of Ethnic Change." *The Journal of Politics* 52 (04): 1124–1154.
- Dalton, Russell J. 2008. *The Good Citizen: How a Younger Generation is Reshaping American Politics*. Washington, DC: CQ Press.
- De Graauw, Els, and Irene Bloemraad. 2017. "Working Together: Building Successful Policy and Program Partnerships for Immigrant Integration." *Journal on Migration and Human Security* 5 (1): 105–123.
- FitzGerald, David Scott, and David Cook-Martin. 2014. *Culling the Masses*. Cambridge, MA: Harvard University Press.
- Fouka, Vasiliki. 2019. "How do Immigrants Respond to Discrimination? The Case of Germans in the US During World War I." *American Political Science Review* 113 (2): 405–422.
- Goodman, Sara Wallace. 2014. *Immigration and Membership Politics in Western Europe*. New York: Cambridge University Press.
- Gordon, Susan M. 2007. "Integrating Immigrants: Morality and Loyalty in US Naturalization Practice." *Citizenship Studies* 11 (4): 367–382.
- Grimmer, Justin. 2013. *Representational Style in Congress: What Legislators Say and Why It Matters*. New York: Cambridge University Press.
- Grimmer, Justin, and Brandon M. Stewart. 2013. "Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts." *Political Analysis* 21 (3): 267–297.
- Hartz, Louis. 1955. *The Liberal Tradition in America: An Interpretation of American Political Thought Since the Revolution*. Vol. 46. New York: Houghton Mifflin Harcourt.
- Heater, Derek Benjamin. 1999. *What is Citizenship?* Malden, Mass: Polity Press.
- Higham, John. 2002. *Strangers in the Land: Patterns of American Nativism, 1860-1925*. New Brunswick, NJ: Rutgers University Press.
- Hill, Howard C. 1919. "The Americanization Movement." *American Journal of Sociology* 24 (6): 609–642.
- Huntington, Samuel P. 1981. *American Politics: The Promise of Disharmony*. Cambridge, MA: Harvard University Press.
- Jones, Martha S. 2018. *Birthright Citizens: A History of Race and Rights in Antebellum America*. New York: Cambridge University Press.
- Joppke, Christian. 2010. *Citizenship and Immigration, Immigration & Society*. Cambridge, MA: Polity.
- King, Desmond. 2009. *Making Americans: Immigration, Race, and the Origins of the Diverse Democracy*. Cambridge, MA: Harvard University Press.
- Kivisto, Peter, and Thomas Faist. 2015. *Citizenship: Discourse, Theory, and Transnational Prospects*. Malden, MA: Blackwell Publishing.
- Kohn, Hans. 1944. *The Idea of Nationalism, a Study in its Origins and Background*. New York: Macmillan Co.
- Kymlicka, Will. 1995. *Multicultural Citizenship: A Liberal Theory of Minority Rights*. Oxford: Clarendon Press.
- Levitsky, Steven, and Daniel Ziblatt. 2018. *How Democracies Die*. New York: Random House.
- Levy, Morris, and Matthew Wright. 2020. *Immigration and the American Ethos*. New York: Cambridge University Press.
- Lipset, Seymour Martin. 1959. "Political Man: The Social Bases of Politics."



- Loizides, Georgios Paris. 2007. "Making Men' At Ford: Ethnicity, Race, And Americanization During The Progressive Period." *Michigan Sociological Review* 21: 109–148.
- Lucas, Christopher, Richard A. Nielsen, Margaret E. Roberts, Brandon M. Stewart, Alex Storer, and Dustin Tingley. 2015. "Computer-assisted Text Analysis for Comparative Politics." *Political Analysis* 23 (2): 254–277.
- Marshall, Thomas. 1950. *Citizenship and Social Class and Other Essays*. Cambridge: Cambridge University Press.
- Martin, Susan F. 2010. *A Nation of Immigrants*. New York: Cambridge University Press.
- McCallum, Andrew Kachites. 2002. "Mallet: A Machine Learning for Language Toolkit."
- Motomura, Hiroshi. 2006. *Americans in Waiting: the Lost Story of Immigration and Citizenship in the United States*. Oxford/New York: Oxford University Press.
- Myrdal, Gunnar. 1964. "An American Dilemma." In *An American Dilemma*. New York: McGraw-Hill.
- Pickus, Noah. 2007. *True Faith and Allegiance: Immigration and American Civic Nationalism*. Princeton: Princeton University Press.
- Pocock, J. G. A. 1995. "The Ideal of Citizenship Since Classical Times." In *Theorizing Citizenship*, edited by Ronald Beiner, 29–52. Albany, NY: State University of New York Press.
- Portes, Alejandro, and Ruben G. Rumbaut. 2006. *Immigrant America: A Portrait*. Berkeley, CA: University of California Press.
- Pozzetta, George E. 1991. *Americanization, Social Control, and Philanthropy*. Vol. 14. Taylor & Francis.
- Riffe, Daniel, Stephen Lacy, Frederick Fico, and Brendan Watson. 2019. *Analyzing Media Messages: Using Quantitative Content Analysis in Research*. New York: Routledge.
- Roberts, Margaret E., Brandon M. Stewart, Dustin Tingley, Christopher Lucas, Jetson Leder-Luis, Shana Kushner Gadarian, Bethany Albertson, and David G. Rand. 2014. "Structural Topic Models for Open-Ended Survey Responses." *American Journal of Political Science* 58 (4): 1064–1082.
- Schildkraut, Deborah. 2005. *Press "One" for English: Language Policy, Public Opinion, and American Identity*. Princeton: Princeton University Press.
- Schildkraut, Deborah J. 2007. "Defining American Identity in the Twenty-First Century: How Much "There" is There?" *Journal of Politics* 69 (3): 597–615.
- Schildkraut, Deborah J. 2010. *Americanism in the Twenty-First Century: Public Opinion in the Age of Immigration*. New York: Cambridge University Press.
- Schlesinger, Arthur M. 1991. *The Disuniting of America: Reflections on a Multicultural Society*. New York: W.W. Norton.
- Schneider, Dorothee. 2001. "Naturalization and United States Citizenship in two Periods of Mass Migration: 1894–1930, 1965–2000." *Journal of American Ethnic History* 21 (1): 50–82.
- Schonhardt-Bailey, Cheryl. 2006. *From the Corn Laws to Free Trade: Interests, Ideas, and Institutions in Historical Perspective*. Cambridge, MA: Mit Press.
- Schwartz, Seth J., Irene J. K. Park, Que-Lam Huynh, Byron L. Zamboanga, Adriana J. Umaña-Taylor, Richard M. Lee, Liliana Rodriguez, Su Yeong Kim, Susan Kraus Whitbourne, and Linda G. Castillo. 2012. "The American Identity Measure: Development and Validation Across Ethnic Group and Immigrant Generation." *Identity* 12 (2): 93–128.
- Sides, John, and Jack Citrin. 2007. "European Opinion About Immigration: The Role of Identities, Interests and Information." *British Journal of Political Science* 37 (03): 477–504.
- Smith, Rogers M. 1993. "Beyond Tocqueville, Myrdal, and Hartz: the Multiple Traditions in America." *American Political Science Review* 87 (3): 549–566.
- Smith, Rogers M. 1999. *Civic Ideals: Conflicting Visions of Citizenship in US History*. New Haven, CT: Yale University Press.
- Theiss-Morse, Elizabeth. 2009. *Who Counts as an American? The Boundaries of National Identity*. New York: Cambridge University Press.
- Transue, John E. 2007. "Identity Salience, Identity Acceptance, and Racial Policy Attitudes: American National Identity as a Uniting Force." *American Journal of Political Science* 51 (1): 78–91.
- Walzer, Michael. 1990. "What Does it Mean to be an "American"?" *Social Research* 57 (3): 591–614.

- Wan, Amy J. 2014. *Producing Good Citizens: Literacy Training in Anxious Times*. Pittsburgh, PA: University of Pittsburgh Press.
- Waters, Mary C., and Tomás R. Jiménez. 2005. "Assessing Immigrant Assimilation: New Empirical and Theoretical Challenges." *Annual Review of Sociology* 31: 105–125.
- Williamson, Abigail Fisher. 2018. *Welcoming New Americans? Local Governments and Immigrant Incorporation*. Chicago, IL: University of Chicago Press.
- Wright, Matthew, Jack Citrin, and Jonathan Wand. 2012. "Alternative Measures of American National Identity: Implications for the Civic-Ethnic Distinction." *Political Psychology* 33 (4): 469–482.
- Zolberg, Aristide R. 2006. *A Nation by Design: Immigration Policy in the Fashioning of America*. New York/Cambridge, MA: Russell Sage Foundation/Harvard University Press.

## Appendix. Composition of document based on frequency of topics by number (top 6 shown).

Year	T	f	T	f	T	f	T	f	T	f	T	f
1921	10	0.147976997	19	0.138734853	4	0.1360649	0	0.130930376	9	0.076504416	6	0.072807558
1924	10	0.142996841	4	0.130810892	19	0.130058673	0	0.12163382	9	0.101925681	6	0.089589288
1926	4	0.138945678	19	0.137923481	10	0.136755257	0	0.125219042	9	0.100540304	6	0.091194509
1928	4	0.119992804	10	0.117114416	19	0.112676901	0	0.107279923	6	0.094327177	17	0.085811945
1930	4	0.133202955	19	0.131319716	10	0.119440823	0	0.106403013	6	0.098290598	9	0.097276546
1932	19	0.133492684	4	0.133202955	10	0.122772708	0	0.11393597	9	0.100318702	6	0.099449515
1934a	19	0.136679704	4	0.130450529	10	0.12190352	0	0.106547878	6	0.099159786	9	0.098000869
1934b	19	0.1301608	4	0.125525134	10	0.124076488	0	0.10596842	6	0.10249167	9	0.095103578
1934c	4	0.128857019	10	0.124076488	19	0.122482978	6	0.10756193	0	0.107127336	9	0.094958714
1935a	19	0.131117869	4	0.127932233	10	0.124022589	0	0.105632783	6	0.10447437	9	0.096510281
1935b	4	0.129436477	19	0.128422425	10	0.12349703	0	0.10408518	6	0.103360858	9	0.098435463
1936a	9	0.180892813	6	0.170591121	17	0.139440765	3	0.121044886	1	0.109516802	8	0.097743439
1936b	9	0.180703883	6	0.173907767	17	0.135072816	3	0.129975728	1	0.10934466	8	0.088470874
1938a	9	0.176766438	6	0.170142296	17	0.143645731	3	0.124754661	1	0.111506379	8	0.094332679
1938b	9	0.181344008	6	0.169456574	17	0.131610869	3	0.124818049	1	0.112930616	8	0.093765163
1940	9	0.17428434	6	0.168270387	17	0.136276161	3	0.127856627	1	0.115347606	8	0.092735146
1941	9	0.171350968	6	0.163084554	17	0.141591875	3	0.125059046	1	0.118918281	8	0.091284837
1942	9	0.165565178	6	0.157816773	17	0.1448268	1	0.125	3	0.124088423	8	0.092411121
1945	5	0.157312427	13	0.115548066	12	0.100747362	1	0.098402696	18	0.094885698	17	0.090929074
1948	5	0.164885611	13	0.11551776	12	0.113260084	18	0.097456352	1	0.095048164	2	0.085866948
1953	5	0.162522072	13	0.10940259	12	0.107783991	1	0.097336669	18	0.095570924	17	0.08806651
1954	5	0.185666608	13	0.126687207	12	0.114509977	18	0.112309272	2	0.088835094	11	0.07973885
1956	5	0.185714286	13	0.126080586	12	0.117582418	18	0.107765568	2	0.083736264	17	0.07992674
1957	5	0.194376175	13	0.129897354	18	0.112404221	12	0.112115079	2	0.08218881	11	0.075393957
1958	5	0.192496747	13	0.128017927	12	0.113849935	18	0.104597369	2	0.089851092	11	0.08002024
1959	5	0.189749892	13	0.126427642	12	0.116885933	18	0.11225965	2	0.082333382	11	0.076405956
1960	5	0.195532745	13	0.125849357	12	0.112693364	18	0.111825936	2	0.085080237	11	0.08002024
1962a	13	0.133493419	18	0.114638919	15	0.111259338	2	0.100764852	8	0.082621843	12	0.08173248
1962b	13	0.135623111	18	0.117819953	15	0.108918374	7	0.107742694	2	0.10136043	8	0.083221364
1964	13	0.132029545	18	0.115242572	15	0.111885177	7	0.108192043	2	0.09744838	8	0.084018801
1965	13	0.136798791	18	0.117651999	15	0.109254283	7	0.109254283	2	0.100856567	8	0.08422909
1966	13	0.134256927	18	0.122166247	15	0.111083123	7	0.106884971	2	0.094122586	8	0.085894207
1968	13	0.132431979	18	0.115804501	15	0.115468593	7	0.108414511	2	0.098001344	8	0.087252267
1969	7	0.117111853	13	0.116277129	16	0.115609349	15	0.115609349	18	0.10509182	2	0.093071786
1971	16	0.134279086	7	0.131602427	15	0.129996431	13	0.11643469	18	0.094129193	2	0.088954318
1974	16	0.13585209	7	0.127277599	15	0.124598071	13	0.109771347	18	0.097445516	2	0.091907824
1977	16	0.1465311	15	0.128417635	7	0.120727956	13	0.109107997	18	0.098342447	2	0.086551606
1985	16	0.164562511	15	0.128090479	7	0.124758899	13	0.103541995	18	0.092495178	8	0.086007365
1986	16	0.158720421	7	0.130674847	15	0.125065732	13	0.106836109	18	0.094040316	8	0.085276074
1987	16	0.157548659	15	0.128791864	7	0.12563563	13	0.106698229	18	0.093722602	2	0.088812905
1989	16	0.160701439	15	0.130485612	7	0.117715827	13	0.108363309	18	0.097751799	8	0.088399281
1996	16	0.171535653	15	0.11387661	7	0.10599654	8	0.091389583	18	0.076398232	2	0.076013838