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Nationality swapping in the Olympic Games 1978–2017: A supervised machine learning approach to analysing discourses of citizenship and nationhood

Joost Jansen
Erasmus University Rotterdam, The Netherlands

Abstract
While the practice of nationality swapping in sports traces back as far as the Ancient Olympics, it seems to have increased over the past decades. Cases of Olympic athletes who switched their national allegiances are often surrounded with controversy. Two strands of thought could help explain this controversy. First, these cases are believed to be indicative of the marketisation of citizenship. Second, these cases challenge established discourses of national identity as the question 'who may represent the nation?' becomes contested. Using state-of-the-art machine learning techniques, I analysed 1534 English language newspaper articles about Olympic athletes who changed their nationalities (1978–2017). The results indicate: (i) that switching national allegiance has not necessarily become more controversial; (ii) that most media reports do not frame nationality switching in economic terms; and (iii) that nationality swapping often occurs fairly unnoticed. I therefore conclude that a marketisation of citizenship is less apparent in nationality switching than some claim. Moreover, nationality switches are often mentioned rather casually, indicating the generally banal character of nationalism. Only under certain conditions does 'hot' nationalism spark the issue of nationhood.

Corresponding author:
Joost Jansen, Department of Public Administration and Sociology, Erasmus University Rotterdam, Burgemeester Oudlaan 50, 3062 PA Rotterdam, The Netherlands.
Email: jansen@essb.eur.nl

Introduction

Although the number of Olympic athletes representing countries in which they were not born has not necessarily increased since the Second World War (the number of foreign-born Olympic athletes has oscillated between 5% and 9% since then), it seems that the practice of nationality swapping has become more prevalent since the 1990s (Jansen et al., forthcoming). Some of these nationality transfers were highly controversial and the subject of heated discussions in media reports. Athletes who switch nationalities are sometimes referred to as 'mercenaries' who are willing to sell their talents to the highest bidding country, even in the absence of 'genuine' ties to that particular country.

Wrestling with this development, sports federations such as the International Association of Athletics Federations (IAAF) are looking for ways to discourage athletes from switching flags. In academia, controversial stories of athletes swapping their nationalities have led to discussions about the changing notion of citizenship. Often, it is assumed that nationality swapping is indicative of diluting notions of citizenship. Genuine ties to nations, based on birth right or descent (i.e. *jus soli* or *jus sanguinis*), are, increasingly, said to be replaced with 'thinner' ties, that is, based on sheer contractual relations between athletes and states. From this standpoint, citizenship is sometimes believed to become a commodity that is conveniently being traded for talent (Shachar, 2011; Spiro, 2014).

Nationality switching in sports is anything but a novel phenomenon, however, as it traces back as far as the Ancient Greeks (Van Nijf, 2012). It was the talented long-distance runner Sotades, born in Crete, who was bribed to become a citizen of and athlete for Ephesus after first having competed and won races for Crete during the Ancient Olympics. His switch of city-state allegiance led to great Cretan discontent, whereupon Sotades was banished from Crete (Kyle, 2015). More recent examples of controversial nationality swaps of successful athletes include that of the South Korean-born Russian short-track speed skater Viktor Ahn, the Kenyan-born American middle and long-distance runner Bernard Lagat, and the Cuban-born British triple jumper Yamilé Aldama. All three athletes have competed for multiple countries in the Olympics. Aldama competed for no less than three countries because she also represented Sudan prior to competing under the British flag.

The question is whether such controversy over nationality swapping is a characteristic of the Olympics that is emblematic of our (globalised) era and, if so, why? When discussing nationality switching, journalists and scholars tend to invoke mere 'anecdotal evidence about the crème de la crème' (Shachar and Hirschl, 2014: 237) and highlight recent cases of nationality swapping (see also Adjaye, 2010). There is a need for a more systematic and theoretical approach to the study of nationality switching in sports.

With this article I aspire to fill the gap by systematically analysing global English language newspaper coverage about Olympic athletes who switched their nationalities somewhere between October 1978 and November 2017. Through a combination of state-of-the-art machine learning techniques (see DiMaggio, 2015; Evans and Aceves, 2016) and theoretical insights from a range of social sciences (communication, nationalism, and citizenship studies), 1534 newspaper articles were automatically coded according to three generic media frames: the conflict frame; the economic frame; and the morality

frame. This approach enabled me to longitudinally analyse public debate about athletes who swapped nationality. In this way I sought to formulate an answer to the question of how debates about Olympic athletes who switched nationality have evolved.

This article is structured as follows. First, I present a theoretical framework that synthesises prior research on nationality switching in sports with a framework that has proven to be a suitable tool for analysing (changing) media frames over time. Then, the innovative methodological approach of this study will be presented, followed by the findings based on the analysis. Finally, a critical reflection on the implications and limitations of this study is provided.

Theoretical framework

Studies that discuss controversial cases of athletes who switched nationality mainly revolve around two intertwined but analytically distinguishable strands of thought. The first strand mainly concerns the alleged marketisation of citizenship (see Iorwerth et al., 2014; Jansen et al., forthcoming; Kostakopoulou and Schrauwen, 2014; Shachar, 2011; Shachar and Hirschl, 2014; Spiro, 2014), whereas the second strand of debate is primarily concerned with the question of nationhood (Adjaye, 2010; Black, 2016; Campbell, 2011; Poli, 2007).

Towards the marketisation of citizenship?

Public and academic debates firstly revolve around the question of whether (recent) cases of athletes switching nationalities are indicative of a marketisation of citizenship. Especially in times of increasing population mobility, citizenship becomes a highly-contested concept as traditional notions of citizenship (i.e. birth right and the right of descent) are under pressure (Kivisto and Faist, 2007). Increased population mobility has led to a growing number of people with dual citizenship. Descendants of immigrants or, for instance, people who married someone from a different country are often entitled to citizenship rights in multiple countries. Maguire (2008) describes how some athletes make their host countries their new 'homes'. By marrying a citizen of that country or by meeting certain residency requirements, these athletes legitimately qualify for citizenship of their new countries (also see Jansen et al., forthcoming). In the context of the Olympics, the fact that the Olympic nationality of athletes is largely dependent upon their citizenship status (or statuses) means that some athletes are, technically, eligible to represent multiple countries (Jansen et al., forthcoming). An athlete born in country X to a father born in country Y and a mother born in country Z is, in theory, eligible to represent all three countries in three consecutive editions of the Olympic Games.

However, cases of athletes who applied for naturalisation through marriage or residency seem to be less controversial than those in which athletes are actively recruited by national sports federations and governments. As an example, Maguire (2008) describes how the British Olympic Association and the British Government were actively involved in recruiting talented basketball players for the Great Britain Olympic basketball team in 2012. Similarly, Campbell (2011) demonstrates how Qatar has developed specific programmes, which involve the naturalisation of immigrant athletes, to recruit foreign elite athletes as a means to promote the Qatari national project.

The British and Qatari examples seem to be illustrative of a situation in which athletes and states increasingly engage in conveniently exchanging talent for citizenship and money. According to Shachar (2011), this points towards a marketisation of citizenship, that is, a re-conception of citizenship from 'sacred' bond to marketable 'commodity' (Shachar, 2017: 792). The marketisation of citizenship is conceived of as the hollowing out of the very notion of citizenship; 'real' connections between citizens and states are being replaced with 'thinner' connections (Shachar, 2011). Moreover, since resources are unequally distributed between citizens and countries, this process is discriminatory and unfair by default. Immigrant athletes with talent (or talented immigrants in general), as well as states with sufficient funds, have an advantage over those who lack such resources, which, as Shachar argues, threatens the 'political ideal of a common enterprise committed to promoting equality, rights, and collective decision-making' (Shachar, 2017: 811).

Who may represent the nation?

Apart from the issue of the alleged marketisation of citizenship, another dimension of the controversy over switching nationality revolves around the moral question of who may (or may not) represent a nation. Who 'genuinely' belongs to the (imagined) community and should be eligible to wear its vest, wave its flag and sing its hymn during the greatest mediatised sporting event on the planet? According to Poli, the fact that countries now seem to employ a growing number of foreign athletes reveals 'changes in the conception of who can be part of the 'national' [which] indicate the existence of a trend towards a de-ethnicization of the nation' (Poli, 2007: 652).

Conversely, Appadurai (2006: 84) has shown how 'the tensions produced […] by the forces of globalisation' have produced ethnicist tendencies and growing hostility towards immigrants, even though their numbers are often relatively small. Similarly, Bairner argued that 'sport and globalization have become accomplices in a process whereby the importance of national identity has been ensured despite, or arguably because of, supra-nationalist tendencies' (Bairner, 2001: 176). Therefore, instead of leading to weakened forms of national identification, it can also be argued that globalisation is fertile ground for the reassertion of established forms of national identification and the intensification of (ethnic) nationalism (Bairner, 2001; Hogan, 2003; Skey, 2010; Thomas and Antony, 2015). In a similar vein, Calhoun notes that nationalism is given the status of an ethical imperative: 'national boundaries ought to coincide with state boundaries, members of a nation ought to conform to its moral values, etc.' (Calhoun, 1997: 6). Expanding this paradigm to the Olympics, athletes ought to represent the countries to which they naturally 'belong'.

Moreover, in public debates about immigration, 'boundary-maintenance' and 'othering' are discursive attempts to define national boundaries and separate the national 'us' from certain immigrant groups (Skey, 2014). The 2012 'plastic Brits' debate, in which the Britishness of foreign-born athletes representing Great Britain was intensely disputed, is emblematic of these attempts (Poulton and Maguire, 2012). The debate shows how the media, spectators and governing bodies of sports continue to rely on 'established images of the nation', and how national boundaries are (re)negotiated (Black, 2016: 984). For example, while studying the representation of Great Britain's successful

Olympic athlete Mo Farah, a Somali-born Brit, Black found that Farah's case is illustrative of what he calls a 'complicated coalescence of national inclusion and exclusion' (Black, 2016: 979). Mo Farah, though presented and celebrated in newspapers as a symbol of assimilated Britishness, is always positioned in relation to the nation. As such, asking the question of whether naturalised athletes belong to a nation *a priori* entails the performative construction of an established–outsider boundary.

Whereas the heated 'plastic Brits' debate can be conceived of as an example of 'hot' nationalism that is, temporary outbursts of strong ethnic nationalist sentiments, for example caused by immigration (Billig, 1995; Skey, 2009) one might wonder whether nationality switching has always been so fiercely contested. Who, for instance, remembers the track and field athlete Charles Allan, born in Guyana, who represented both Guyana and Canada in the Summer Olympics? And was the case of Fiona May, who competed for Britain and Italy, as controversial as that of, for example, the 'plastic Brit' Yamilé Aldama?

It could be argued that the heatedness of nationalist sentiments in media coverage varies depending upon context, which points towards the relevance of what Billig (1995) calls 'banal nationalism', that is, the daily reproduction of 'an underlying and unspoken set of assumptions' about the national ordering of the world as a world of nations (Fox, 2017: 28). Viewed from this perspective, uncontroversial practices of nationality swapping can help us uncover how the national world is 'routinely breached' (Fox, 2017: 32). Building on Garfinkel's (1967) ethnomethodology, Fox argues that the immigration 'increases our chances of tapping into the otherwise hidden national world of the banal' (Fox, 2017: 37). Therefore, I argue that studying not only controversial but also uncontroversial media coverage about immigrant athletes or Olympians who switch nationality can contribute to our understanding of discourses of nationhood.

Generic media frames: conflict frame; economic frame; and morality frame

In order to longitudinally study how changing discourses of citizenship and nationhood impact debates about athletes who switch their nationalities, I invoke a deductive framework that was originally developed by Neuman et al. (1992). The framework consists of several media frames that are well-suited to analysing the debates about the athletes in question. Moreover, a major advantage of this deductive framework is that it can be applied to large corpuses to study longitudinal changes in public debates (Burscher et al., 2014; Opperhuizen et al., 2018; Semetko and Valkenburg, 2000). The conflict frame, the economic frame, and the morality frame are of particular interest to this study. The conflict frame emphasises disagreement between individuals, groups or institutions over a certain issue. The economic frame discusses issues or events in terms of the economic/financial consequences they have on individuals, groups, or places. The morality frame emphasises the ethical context of the issues at stake. Synthesising the two strands of the debate about nationality swapping in the Olympics and the three types of media frames, the main research question of this study can be further refined and narrowed down to three sub-questions.

First, the conflict frame applies to articles that explicitly mention disagreement between actors over athletes who switched nationality, indicating the general controversy over nationality swapping. Second, the economic frame is present when nationality swapping is described in terms of conveniently exchanging talent for citizenship, thereby referring to financial expenses and/or gains. An increased use of the economic frame would point to the growing importance of the question of the marketisation of citizenship. Third, in articles that contain the morality frame, the eligibility of immigrant athletes representing their new countries is at stake. In line with Black (2016), I argue that merely asking whether an immigrant athlete ought to represent, for instance, Team Great Britain, always entails discursively positioning the athlete outside of what ideally constitutes a 'real' British team. This synthesis of debates about nationality swapping on the one hand and media frames on the other, leads me to formulate the following research questions:

RQ1: Has Olympic nationality switching become more controversial?

RQ2: Are nationality switches by Olympic athletes increasingly framed in terms of an economic exchange?

RQ3: Do media reports about Olympic athletes who switched nationality increasingly contain moral messages about nationhood?

Methodology

Data collection

To determine how debates about Olympic athletes who switched nationality have evolved over time, this study relies on a corpus of 1534 English language newspaper articles. I selected newspaper articles because they form a set of so-called 'Strategic Research Materials' (Merton, 1987) in the sense that they make possible the longitudinal analysis of the debate. In addition, Billig (1995) and others have repeatedly pointed out the importance of newspapers to the reproduction of discourses of national belonging. I only selected English language newspaper articles because the supervised machine learning approach I use requires texts to be written in the same language.

The articles cover a period spanning October 1978 to November 2017 and include various types of news source, from tabloid newspapers (e.g. the *Daily Mail*) to broadsheet newspapers (e.g. the *New York Times* and the *Guardian*), as well as from a variety of different countries (see Table 1 for a complete overview of newspapers in the corpus). The corpus was retrieved from the digital newspaper archive LexisNexis (from the category 'major world publications'). In order to retrieve a large yet balanced corpus of texts that captures a highly specific subject matter such as the topic *in casu*, different (Boolean) search queries were tested.

The search query that generated the most satisfying results asks LexisNexis to return only newspaper articles about the Olympic Games that contain a combination of the terms 'switch' and 'nationality' or variations of those terms.[1] Next, in order to force

Table 1. Complete overview of newspapers in the corpus.

Australia

Advertiser, Age, Australian, Australian Financial Review, Canberra Times, Courier Mail, Daily Telegraph, Generic Tabloid, Herald Sun, Hobart Mercury, Sunday Mail, Sunday Tasmanian, Sunday Telegraph, Sydney Morning Herald, Weekly Times, West Australian

Canada

Financial Post, Gazette, Globe and Mail, National Post, Ottawa Citizen, Toronto Star

Great Britain

Bath Chronicle, BBC Monitoring, Belfast Telegraph, Birmingham Post, Daily Mail, Daily Post, Daily Record and Sunday Mail, Daily Telegraph, Evening Gazette, Evening Standard, Evening Times, Daily Express, Guardian, Herald, Independent, Irish Times, Liverpool Daily Echo, Daily Mirror, News of the World, Observer, South Wales Echo, Sun, Sunday Express, Sunday Mercury, Sunday Mirror, Times, Western Daily Press, Western Mail

USA

Christian Science Monitor, Daily News, Herald Tribune, New York Times, Newsweek, People, Philadelphia Inquirer, St. Petersburg Times (Florida), *USA Today, Wall Street Journal, Washington Post*

Other

Africa News, Baltic News Service, Business Day (South Africa), *Concord Times* (Sierra Leone), *Daily Yomiuri* (Japan), *Dominion Post* (New Zealand), *ITAR-TASS* (Russia), *Japan Times, Jerusalem Post, Korea Herald, Korea Times, Moscow News, Moscow Times, Nation* (Thailand), *New Straits Times* (Malaysia), *New Zealand Herald, Olympian, South China Morning Post, Sunday Mail* (Zimbabwe), *Sunday Times* (South Africa), *The Press* (New Zealand), *The Straits Times* (Singapore), *Vanguard* (Nigeria)

LexisNexis to return only those articles that are specifically about athletes (and hence exclude irrelevant articles that, coincidentally, contain the former terms), the search terms 'compete' and 'represent' (and their past tenses) were added. In total, the search generated over 2000 articles. After removing duplicating articles, a final selection of 1534 articles were used for analysis.

Using a computer to code frames

The longitudinal analysis of media reports about Olympians who switched their nationalities ideally requires a large corpus of newspaper articles. When annotating (large) corpuses of text documents, social scientists have hitherto mainly relied on human coding. It is common practice to either annotate only a subsample of documents from the corpus, or rely on different human coders who, as a group, work on annotating the whole corpus by hand.

However, prior research has shown that human coding of large corpuses is generally very time-consuming and costly (see Burscher et al., 2014; Mikhaylov et al., 2012). Moreover, when different researchers are instructed to simultaneously annotate a certain number of documents, inter-coder reliability tends to be far from optimal. Therefore, to save resources and produce consistent results, this study employs a supervised machine learning approach instead of relying on human coding. It has been demonstrated that this approach can be used for the automatic coding of the three media frames discussed earlier (Burscher et al., 2014; Opperhuizen et al., 2018).

Table 2. Indicator questions for media frames and excerpts of texts coded accordingly.

Item	Phrasing of yes-or-no indicator questions
C1	Does the item reflect controversy or disagreement between individuals, institutions or countries about switching national allegiance?
C2	Does the item refer to two (or more) sides of the issue of switching nationality?
ex:	"*IOC* [International Olympic Committee] *President Juan Antonio Samaranch was quoted by* The Mail *today as saying he* **opposes** *her running for Britain; the paper said the African Olympic Committee voted in Tunisia yesterday against her competing in the Olympics.*"
E1	Is there a reference to an economic exchange between actors involved in switching nationality?
E2	Is there a reference to economic consequences of pursuing or not pursuing a transfer of allegiance?
ex:	"*Speculations as to the veracity of her reasons for assumption of dual nationality are varied but the most prominent has been the opportunity to garner more social and* **financial benefits** *as a Spanish national in addition to the more open opportunities for training facilities and competitions.*"
M1	Does the item contain the moral question of who belongs to a nation?
M2	Does the item offer specific moral prescriptions in relation to switching national allegiance?
ex:	"*I don't think we can question her motives. I think* **she's possibly more British** *than some of the guys that we've acquired. She hasn't just come over from Jamaica or America.*"

Supervised machine learning means 'building a statistical model for predicting, or estimating, an output based on one or more inputs' (James et al., 2013: 1). In the context of the social sciences, these models are able to 'learn and reliably extend many sociologically interesting textual classifications to massive text samples far beyond human capacity to read, curate, and code' (Evans and Aceves, 2016). The idea is to feed the computer with examples of texts and their corresponding (binary) labels, from which it can 'learn' and predict codes belonging to unseen documents.

In this study, 300 newspaper articles (randomly sampled from the corpus) were manually coded. These articles are the examples from which the algorithm 'learns' to construct a model that is capable of accurately annotating newspaper articles. In this case, an algorithm is trained to accurately perform a binary classification task: is frame X present in the article or not? Burscher et al. (2014) estimate that 300 articles should suffice for the algorithm to generate sufficiently accurate predictions for the frame codes corresponding to all newspaper articles in the corpus.

The 300 articles were hand-coded according to a coding scheme derived from the work of Burscher et al. (2014).[2] For each media frame, the coding scheme contains two yes-or-no indicator questions. The very specific and theoretical nature of the subject matter of this study, that is, nationality swapping in relation to changing discourses of citizenship and nationhood, required some minor adjustments of the indicator questions as formulated by Burscher et al. Table 2 shows the final wording of each indicator question used to assess whether or not a media frame was present in an article. Frames are considered to be present in a newspaper report if at least one of the two questions can be answered with 'yes'. Furthermore, Table 2 also shows excerpts of newspaper articles that were hand-coded accordingly.
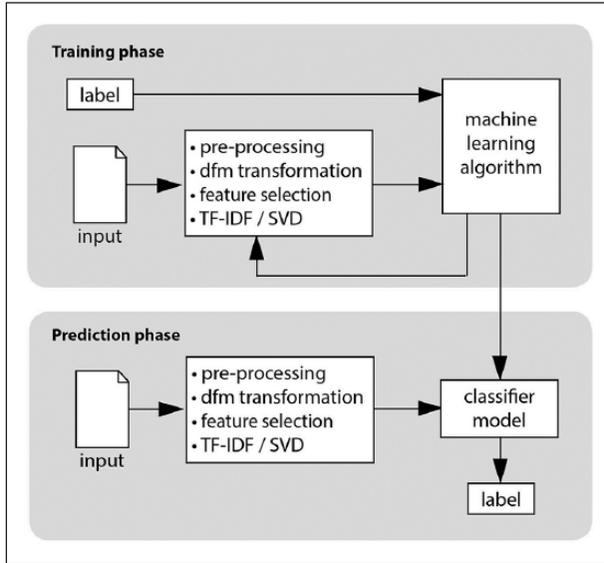
Figure 1. Machine learning pipeline.

Constructing a machine learning pipeline

Before machines are capable of 'understanding' and annotating texts, several steps need to be performed. Each step is formalised in and carried out by a machine learning pipeline, which is the chain of steps that covers the entire workflow (see Figure 1). Although it goes beyond the scope of this paper to discuss each step in detail, I want to briefly comment on the technical aspects of employing supervised machine learning for text analysis.[3] The steps that I iteratively cycled through are:

1. Text pre-processing and transformation of the corpus into a document-feature matrix.
2. Feature selection: removing irrelevant parts, as well as numbers, punctuation, symbols, and stop words.
3. Applying the term frequency–inverse document frequency weighting scheme and Singular Value Decomposition in order to reduce dimensionality.
4. Testing different classification algorithms using n-fold cross-validation.
5. Calculating the predictive performance of the algorithms using two metrics: Accuracy (AC); and area under curve (AUC).
6. Predicting the codes corresponding to all newspaper articles in the corpus.

The final algorithm used for this study is called 'eXtreme Gradient Boosting' (XGBoost).[4] Table 3 shows the results that were achieved by training the XGBoost algorithm on the 300 hand-coded documents using 10-fold cross-validation (repeated three times).[5] For all three frames, the AC obtained significantly exceeds ($p < 0.001$) the baseline predictions (also called the no-information rate, that is, the proportion of the class

Table 3. Performance model.

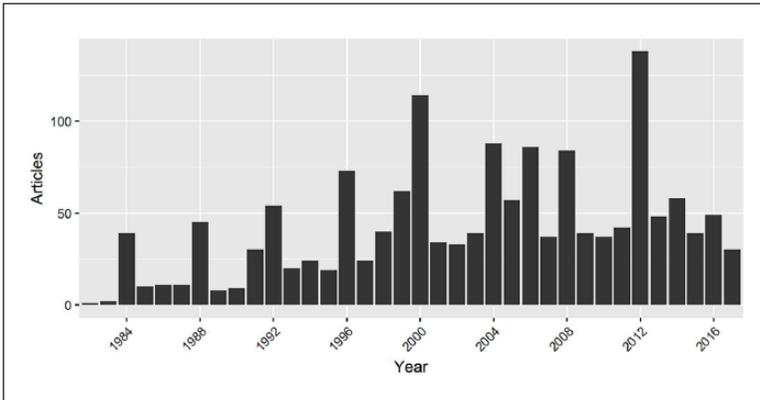|	Conflict frame	Economic frame	Morality frame
Baseline	0.64	0.80	0.76
Accuracy	0.76	0.84	0.82
Area under curve	0.79	0.85	0.80

Source: author's own calculations.

Figure 2. Articles mentioning Olympians who switched nationality.

that is most prevalent). Moreover, the AUC is higher than the no-information rate for all three models, which indicates that these models are sufficiently capable of discriminating between the presence or absence of frames. Note that it is usually harder for algorithms to predict codes that are less prevalent in the corpus (i.e. have a higher baseline).

Results

A short history of controversy

Figure 2 shows that, between 1978 and 2017, Olympic athletes who switched nationalities have always attracted some attention in English language newspaper reports. Every four years, in the same calendar year that the Summer Olympic Games were held, the number of newspaper articles dedicated to those cases significantly surpassed that of the adjacent years. Interestingly, it seems that nationality swapping is less of an issue in the context of the Winter Olympics. Overall, I note an upward trend in the media attention directed towards nationality switching. The Olympics Games in 2000 and 2012 saw the highest absolute number of articles mentioning naturalised athletes, which could partly be explained by the fact that in those years the Olympics were hosted in English speaking countries (in Sydney and London, respectively).

Although it seems justified to conclude that nationality swapping has become a bigger issue over time, the analysis also reveals that the practice as such has not necessarily
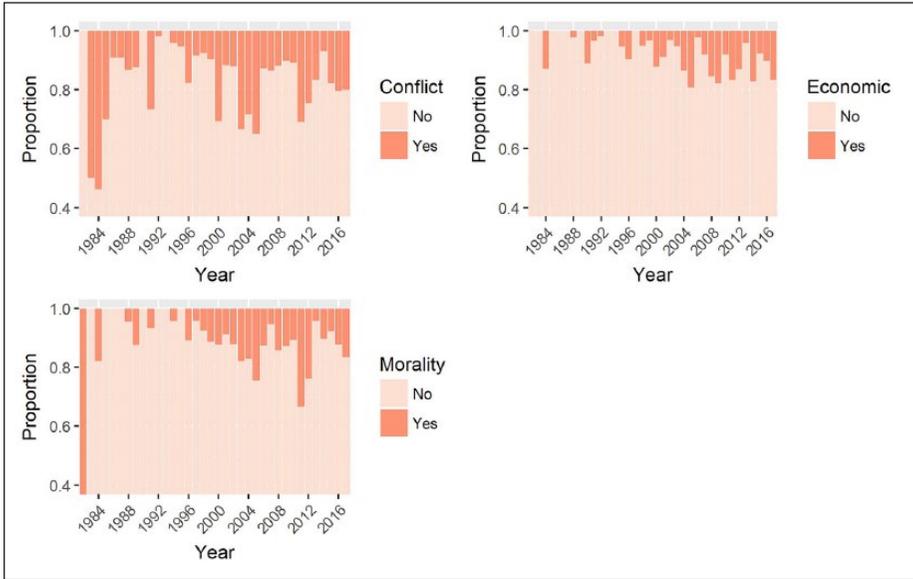
Figure 3. Proportional prevalence of media frames.

become more controversial. Figure 3, which shows the proportional prevalence of the three media frames in the years 1978–2017, indicates that, especially before the 1990s and after the 2000s, cases of athletes who switched nationality were surrounded with controversy.

The naturalisation of the South African long-distance runner Zola Budd was by far the most widely reported and controversial nationality switch before the 1990s. At the time, South Africa was banned from participating in international sports competitions due to its apartheid policy. Consequently, many South African athletes sought accommodation elsewhere. Zola Budd, having a British grandfather, was entitled to register as a British citizen and, after her citizenship application was fast-tracked by the British government, she competed as a 'Brit' during the Los Angeles 1984 Olympic Games (Hardman and Iorwerth, 2012). Another early and controversial case is that of Sydney Maree (a native South African runner). The controversy surrounding the stories of Budd and Maree can best be explained in terms of the larger geopolitical indignation over South Africa's apartheid policy. As we shall see, contemporary controversy over nationality swapping is spurred by other reasons, namely changing discourses of citizenship and nationhood.

Buying sporting success

Despite the fact that the practice of financially motivated nationality switching is not limited to recent years (many articles about Zola Budd's controversial naturalisation make mention of the fact that she received an undisclosed sum of money from the *Daily Mail*, the tabloid newspaper that campaigned for Budd's naturalisation), Figure 3 clearly shows that, especially after the Sydney 2000 Olympics, newspaper articles frequently referred to nationality swapping as an economic transaction between countries and athletes.

Examples of reports that contain the economic frame are numerous and heterogeneous. Some reports are rather non-dismissive with respect to the economic nature of some transfers of national allegiance, such as a 2014 article in *USA Today* about the American born snowboarder Vic Wild, who switched allegiance to Russia for financial and sporting reasons. Meanwhile, other articles are quite explicit in expressing concerns about the economic side to nationality swapping. In August 2017, for instance, a report in the British newspaper the *Guardian* contained the following statement by the IAAF president Sebastian Coe: 'Athletes are not tradable commodities. They are human beings and we want the best athletes of their generation competing and showcasing our sport. We don't want a sport where they are being traded in the dark. That is clearly not something I would condone.'

Note, however, that most of the articles do not seem to be concerned with a marketisation of citizenship. Partly, this lack of concern could be the effect of the narrow (i.e. strictly *economic*) formulation of the indicator questions. The fairly low prevalence of the economic frame could, however, also be explained by the fact that the practice of buying talent with citizenship is relatively exceptional (Jansen et al., forthcoming). Often, nationality switching is the result of athletes having dual citizenship, a feature of the Olympic field that can be traced to cross-national differences in attributing citizenship.

More importantly, the prevalence of the economic frame in media reports has not grown but levelled-off between 2000 and 2017. In line with what Jansen et al. (2018) hypothesised, this stagnation could indicate that countries have recently become more reluctant to 'buy' talent at the price of citizenship. Somewhat counter-intuitively, a 2009 article in the *Daily Mail* states that Qatar (frequently referred to as the most striking example of a country importing talented athletes), realised that 'the plan [to import sporting success] had backfired' and now 'instead of brashly buying talent, Qatar grooms it and returns it to the rightful owner'.

The fact that Qatar is apparently turning against importing sporting success could mark a turning point for the Olympics, so that the heyday of conveniently buying talented athletes might now be behind us. Nationalist backlashes against processes of globalisation and migration could potentially reinforce the hesitation of states to further liberalise their citizenship regimes. Some scholars (cf. Koopmans et al., 2012) have already observed a stagnating trend of the liberalisation of citizenship rights from 2002 onwards. The debate on conveniently swapping nationality in the context of sports seems to evolve in step with this trend.

Between cool and hot nationalism

The analysis (see Figure 3) also shows the importance of distinguishing between the two strands of debate about nationality switching. Debating changing notions of citizenship frequently goes hand in hand with the question of nationhood. Yet, while the prevalence of the economic frame plateaued, the number of articles concerned with the moral question of who may represent a nation steadily increased. This finding is consistent with research that argues that globalisation and migration are fertile ground for the reassertion of established forms of national identification.
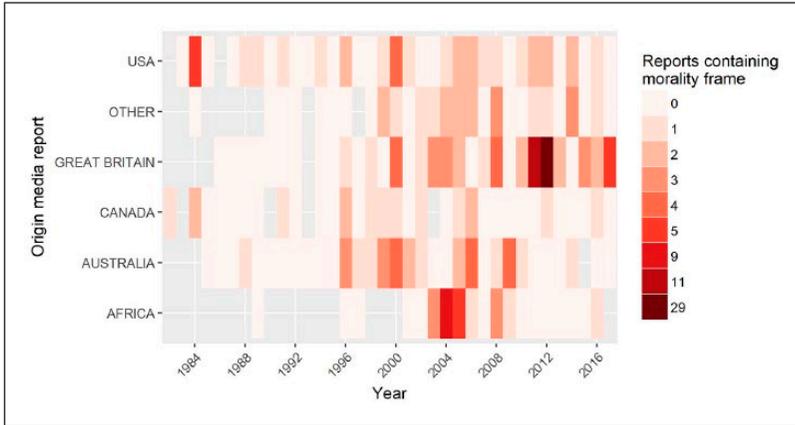
Figure 4. 'Heat map' of nationalism in articles about nationality swapping.

The debate gained serious traction in anticipation of the London 2012 Olympics when many British newspapers participated in what was coined the 'plastic Brits' debate. The debate concerned 61 British athletes who were born outside of Great Britain. Discussions about the naturalisation of Yamilé Aldama were the most heated. Before competing under the British flag in 2012 she had already represented Cuba and Sudan in the Olympics.

Nationhood is debated in many different ways. Some articles that contain the morality frame only indirectly address the question of who may represent a nation. Instead of expressing attitudes of disapproval, these reports often contain, for example, comments by interviewed sportspersons on the measure of Britishness that can or cannot be ascribed to a specific athlete. While in explicit commentaries it becomes immediately apparent how the nation and its boundaries are discursively (re)imagined, indirect commentaries are more unconscious discursive attempts to position (future) naturalised athletes as outsiders. For example, even when Aldama's coach Frank Attoh argued that Aldama is 'possibly more British than some of the guys that we've acquired' (Turnbull, 2011), she was still identified and managed as an 'outsider' individual (cf. Black, 2016).

Like the previous two media frames, most articles discussing nationality switching did not contain the morality frame. It seems that nationality swapping often takes place fairly unnoticed. Nevertheless, it does *get* noted. Many of the 1534 articles only briefly mention the names of the athletes who switched nationality, which may at first seem trivial and insignificant. However, it is precisely these reports that uncover how 'the nation's taken-for-granted status' is routinely and subtly reproduced (Bonikowski, 2016: 440). Here, even when latent, the nation always continues to figure 'as a cognitive construct [that] structures the contours of what is possible and desirable in subtle and unobtrusive ways'.

Figure 4 nicely shows the generally dormant or 'cool' character of nationalism, which under certain conditions gradually heats up, eventually causing outbursts of hot nationalism. But exactly when and where does hot nationalism spark the issue of who may have

the honour of representing the nation at the Olympic Games? Given the nature of the data, this is a difficult question to answer. Three tentative observations are worth highlighting, however.

First, Figure 4 shows that this question gains importance in countries in the years in which they organised the Olympics. In 2000 (Sydney) and 2012 (London) one clearly notes an increase in articles in Australia and Great Britain, respectively, that contain the morality frame. These spikes indicate that there seems to be some sort of relationship between organising the Olympics on the one hand and the number of naturalised or immigrant athletes and their reception on the other.

Second, it seems that discourses of nationhood in the context of sports are rooted in broader societal discourses of immigration, multiculturalism, and ethnicity. For example, Castles and Miller (2009) describe how the sceptical immigration climate in Australia led to the election of the centre-right Howard Government in 1996, which resulted in stricter immigration policies. Figure 4 also clearly shows a peak of nationalist sentiment in Australian press coverage of nationality swapping in 2000. Similarly, Castles and Miller (2009) note a rise of anti-immigrant sentiments, political parties, and movements in many European countries, especially since the 2000s. The gradual heating of the debate in Great Britain seems to evolve in step with this trend. In contrast, Canada has remained one of the few countries with relatively open immigration policies and 'political opposition to immigration per se is virtually nonexistent' (Castles and Miller, 2009: 294). Not surprisingly, nationality swapping has not been a particularly a controversial topic in Canadian newspapers.

Third, not only countries that naturalise athletes are concerned with the question of who may represent their nations. Between 2003 and 2005, several different African news sources in the corpus devoted substantial attention to the question of nationhood. In that time, the 'brawn drain' of talented African athletes who switched their allegiances to Qatar and Bahrain was viewed with increasing concern. In July 2004, the then Foreign Affairs minister of Kenya, Ali Mwakwere, said to the Kenyan newspaper the *Daily Nation* that 'Kenyan athletes should not be encouraged to disregard their birthplace.' And in August 2004, the Nigerian *Vanguard* newspaper wrote that 'such enlistments undermine the archetypal image of a tearful athlete on the medal stand, singing his or her national anthem, watching the flag hoisted aloft.' These examples demonstrate how also countries which lose their talented athletes express their dissatisfaction with nationality swapping in moral terms of national belonging.

Discussion and Conclusions

In this article, I have argued that in the recent history of the Olympic Games (1978–2017) the practice of nationality switching has often provoked substantial criticism. The nature of this criticism, however, has changed over time. By combining theoretical insights from studies on changing notions of citizenship and nationhood with innovative machine learning techniques, I have sought to demonstrate how and why the issue of nationality swapping has become particularly contested after the 2000s. Generally, newspaper articles make mention of nationality changes rather casually. However, in reports about nationality switches that *do* provoke public debate, questions regarding

the marketisation of citizenship and nationhood could help explain why they are surrounded with controversy.

First, in relation to the latter point, I argue that unfolding cases of Olympic athletes who swapped passports contributes to a better understanding of how processes such as globalisation impact on established national forms of identification. In addition, these stories show how 'cool' nationalism may heat up over time and vice versa (cf. Skey, 2009). Nationality swaps that are mentioned rather casually are exemplary of Billig's notion of banal nationalism, referring to the daily and 'mindless remembrance' of the world of nations (Billig, 1995: 144). As such, I followed a 'breaching approach' to uncover the myriad ways in which the nation is taken for granted. I studied the 'edges of the nation' (i.e. the places, times and context where the nation and its boundaries are transgressed) that challenge 'our cherished notions of who we are' (Fox, 2017: 37).

Under the right conditions, banal or cool nationalism can turn into hot nationalism. The heated 'plastic Brits' debate in 2012 is illustrative of such temporary outbursts of hot nationalism, in which the question of nationhood becomes contested. This contestation takes place in many different ways. In the acts of both rejecting and accepting, for example, the triple jumper Yamilé Aldama as a 'genuine' British athlete, immigrant athletes are ascribed a degree of difference and as such are always positioned in relation to and outside the nation (cf. Black, 2016; Skey, 2014). Unfortunately, the nature of this study allows me to offer only tentative explanations for the controversy over the otherwise largely un-noted phenomenon of nationality swapping. Therefore, I argue that future studies should explore the conditions under which banal nationalism turns into hot nationalism and vice versa.

Second, regarding the alleged marketisation of citizenship, the results suggest that countries have become more hesitant in 'buying' or importing sporting success, with Qatar's (apparent) disavowal of the 'brashly buying talent' policy as the ultimate example. This finding is in line with research that shows how the revival of nationalist sentiments slowed or reversed the liberalisation of citizenship regimes after 2002 (cf. Koopmans et al., 2012). Jansen et al. (2018) have recently argued that Olympic nationality swapping needs to be understood against the background of complex national differences in granting citizenship, which naturally leads to 'issues' of multiple citizenship. It seems that trading talent for citizenship is a rather exceptional practice, which is only expected to further decrease during or after periods of heated nationalism. Therefore, I conclude that invoking 'anecdotal evidence about the crème de la crème' to make claims about the marketisation or dilution of citizenship does not contribute to a better understanding of these changing notions of citizenship.

From a methodological perspective, this article attempts to bridge the social sciences and computer science. Unavoidably, bridging implies that some concessions needed to be made with respect to connecting theory and methodology. Most importantly, the deductive framework used in this study allowed for minimal theoretical flexibility, given that the indicator questions were pre-formulated. The marketisation of citizenship, for instance, is somewhat narrowly operationalised in terms of an economic exchange. Future research on changing notions of citizenship and nationalism should consider developing a tailored framework that is better able to capture the theoretical intricacies of these complex notions of national belonging.

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Notes

1. LexisNexis search query: Olympic w/50 (grant! OR acquire! OR request! OR receive! OR change! OR appl! OR switch! OR swap! OR obtain! OR get! OR assum! OR gain!) w/5 (citizenship OR nationalit!) AND (represent OR represented OR compete OR competed).
2. To establish coder reliability, a trained research assistant from Erasmus University Rotterdam also conducted (independently from the author) the manual coding of all 300 newspaper articles. Krippendorff's alpha and pairwise agreement (in parentheses) for each frame were: conflict frame = 0.87 (0.94); economic frame = 0.95 (0.98); and morality frame = 0.79 (0.93). In a few instances, the author's initial coding was amended after discussing coder disagreement.
3. For additional information on step 1 and step 2, see Welbers et al. (2017). See Burscher et al. (2014) and Karl et al. (2015) for detailed information regarding step 3. Explanations of cross-validation and performance metrics are provided by Evans and Aceves (2016). For information on commonly used algorithms for text classification, see Aggarwal and Zhai (2012).
4. Although it goes beyond the scope of this article to explain how the eXtreme Gradient Boosting algorithm works, the basic idea is that it tries to minimise variation in the data by building an ensemble of decision trees (i.e. the model) by means of an additive strategy. This means that the algorithm iteratively learns from the trees it grows and subsequently adds to the model. For more information, see: https://xgboost.readthedocs.io/en/latest/model.html/.
5. All steps were performed in the R programming environment. In particular, I used the quanteda package for text pre-processing and the caret package for model building and evaluation. For the entire machine learning pipeline, along with an overview of the 1534 newspaper articles, and the frame codes corresponding to the 300 hand-coded newspaper articles, see Jansen (2018).

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