

BALANCING NATIONAL SECURITY AND REFUGEE RIGHTS UNDER PUBLIC INTERNATIONAL LAW

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ABSTRACT

Does the national security exception in international refugee law constitute a real, legally measurable justification, or rather an excuse for introducing the politics according to the will of current government? A lack of sufficiently comprehensive set of rules within the 1951 Convention Relating to the Status of Refugees entails large, but not unlimited, subjectivity in interpreting legal norms. This work briefly presents the relevant legal norms and proposes a model aiming to balance between refugees' rights and national security interests. The model can help in limiting subjectivity during adjudication process by quantifying the boundaries to implementation of the limitations of refugees' rights. The provided example demonstrates the use of the model.

1 INTRODUCTION

The first part of introduction presents the relevant legal norms and rules governing implementation of the limitations of refugees' rights for the purpose of protecting national security. This provides relevant legal basis for this study. The second part identifies challenges related to the asylum adjudication.

1.1 Relevant Legal Norms and Rules

Articles 32(1) and 33(2) of the 1951 Convention Relating to the Status of Refugees, hereinafter: Refugee Convention, enable the State to expel a refugee from their territory on grounds of national security (Fischer-Lescano et al. 2009). Under the second mentioned provision, if the territories where the refugee is to be returned or expelled, are such that 'his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion', the refugee can be expelled only when 'there are reasonable grounds for regarding as a danger to the security of the country in which he is, or who, having been convicted by a final judgment of a particularly serious crime, constitutes a danger to the community of that country'.

It seems that to establish that the aim of national security is legitimate in given circumstances, there are at least two elements that must be met. First, there must exist an objectively measurable risk of harm, including not only immediate danger, but also possible, long-run threats (UN 1951). Second, such 'harm' must refer to the nation, i.e., to the State or to its people taken as a whole. Although an obligation to go a step further and carefully assess whether this risk is significant enough to outweigh the need for protecting refugees' rights seems not to be justiciable, it can still improve the quality in which the State obligations under the Refugee Convention are fulfilled. Such balance can be achieved through applying various tests.

There are four such basic tests. First, whether the State pursued a legitimate aim (national security). Second, requirement of a statutory form covers not only a duty to impose the limitations exclusively on a legal basis, but also obligations pertaining to a certain quality of the law. For instance, such provisions

have to be formulated with sufficient precision – if need be, with appropriate advice – to foresee, to a degree that is reasonable in the circumstances, the consequences which a given action may entail. *Olsson v. Sweden*, (1988) is a good example of relevant application case. Third, the necessity test requires that the legitimate aim cannot be achieved without the applied measure and the degree of such measure should not exceed what is ‘reasonably required for that purpose’ (Greenwood 2011). In this respect, the forcible expulsion constitutes a last resort and the less far-reaching means, hence voluntary repatriation, local asylum, resettlement etc., should be considered first. Fourth, the proportionality test refers to weighing the level of risk of harm to the national security caused by a refugee against the need for protecting his rights, including the risk of harm to a refugee in case of his expulsion. However, given the wide margin of appreciation awarded to the states, even the views on what is ‘clearly disproportionate’ can differ significantly. The need for complete and objective criteria, acceptable for all sides of the dispute, is apparent. Above all, it is often emphasised that when applying the abovementioned tests, all relevant circumstances of the case must be taken into account (Shaw 2008). Only the correct identification of the broadest possible scope of factors at stake would allow to strike a fair and just balance. In practice, as many politicians tend to emphasise one aspect and underestimate others, merely this step in itself would make a difference.

1.2 Asylum Adjudication Challenges

Asylum officers must consider both rights of legitimate refugees, fraudulent applicants, and potential threats to national security. An asylum seeker must meet the definition of a refugee, i.e., be considered an individual who has experienced persecution or has a well-founded fear of ill-treatment because of political opinion, race, religion, nationality, or membership of a social group. The objective of every adjudication decision is to grant protection to a qualified individual and deny fraudulent and national security threat claimant. Just treatment of asylum seekers is difficult and subjective (Barry-Murphy and Stephenson 2015). The asylum officers grant asylum at astonishingly different rates, making this process unfair if evidently dependent on which asylum officer was assigned to a case (Schoenholtz et al. 2014). For instance, Newark’s individual rates that considered asylum officers with more than 100 cases varied from 2 to 93 percent of granted cases. Large disparities are also clear when one compares the first instance decisions on the non-EU asylum applications in 2015. In Denmark, the Netherlands and Sweden, the outcome was mostly positive. A totally opposite statistics come from the EU members with anti-immigrant governments: Poland, Hungary, Latvia (Eurostat 2017). With these disparities it is difficult to solidify asylum officers’ standings as symbolic referents of the rule of law. The problem of subjectivity hidden by pro-immigrant or conservative interpretations of statute multiplied by individual biases of officers (Schoenholtz et al. 2014) appear that the adjudication process is unfair or even corrupt. Schoenholtz et al. (2014) points out that “as long as human beings adjudicate claims and not computers there will be discrepancies in the grant rate.” (Schoenholtz et al. 2014, 175)

During the adjudication decision asylum officers simulate themselves as representations of State power and petitioners as outsiders (Barry-Murphy and Stephenson 2015). This mental simulation requires high cognitive effort. It has to be built on moral grounds, legal, sociological and psychological knowledge, affective and cognitive skills, and analytical reasoning abilities to transform understanding of facts into a comprehensive context. This in turn should allow for projecting themselves as representative and unbiased state power. Self-awareness of one’s subjectivity is a first step towards objectivity. Becoming more aware of state-centered subjectivity can help balancing perceptions of threats to national security, persons fabricating evidence, and refugee rights. For instance, Barry-Murphy and Stephenson (2015) proposed and described aesthetic, cognitive, affective, and moral imaginations as main dimensions that can help identify and mitigate state subjectivity in asylum adjudication. Fenton et al. (2013) proposed a set of idioms based on BN for developing complex legal arguments. These BN idioms have potential to provide a way to experiment with hypothetical probabilities within legal cases and ease the cognitive burden of human mind by helping to deal with memory and processing constraints related to complex

evidence and inference. The effort placed into the process of adjudication and methods used are important consideration for achieving objectivity. In this work Bayesian Network (BN) model is proposed to identify the important factors adjudication factors. The triangulation (Balaban 2015) of the model by multiple asylum officers, and not merely supervisors reviewing decisions could be helpful to mitigate subjectivity.

The remainder of this paper is structured as follows: Section 2 presents research approach. In Section 3 asylum adjudication model is described while Section 4 demonstrates its use. Finally, Section 5 briefly discusses future work.

2 RESEARCH APPROACH

BN is a directed acyclic graph where nodes are random variables connected by arcs. Two nodes should be connected if one variable affects or causes the other creating probabilistic dependencies between nodes. Prior belief for the values of each node can be generated without any new evidence, while to calculate posterior probabilities one must provide new evidence(s). BN has four main modes of reasoning: predictive, diagnostic, intercausal, and combined (Maindonald 2011).

The key importance when developing BN is its structure, which is dependent on causalities in the modeled system. The root causes should be identified first and be followed with their effects, which are followed by the next order effects, and so on, until leaves are reached. BN can be used to represent a set of hypothesis and evidences for these hypothesis. The asylum officer will rarely have full information about an asylum seeker. In order to make a final decision about granting or denying asylum, asylum officer must assemble relevant hypothesis related to motives and opportunities of a migrant, dangers to the migrant, and potential consequences to national security. These hypothesis ought to be supported with organized in a causally comprehensive structure evidences. A combination of predictive, diagnostic and inter-causal inferences are likely needed in the complex asylum cases.

Fenton et al. (2013) defined a legal argument as a “collection of hypothesis and evidence about these hypothesis” (Fenton et al. 2013, 64) and characterized and explained a systemic way of generating legal case models using BN idioms. They pointed out that hypothesis in legal cases are typically preconditions for guilt and thus should be modeled as causes. In the *direct evidence (DE) idiom*, hypothesis is directly linked to one or more evidences. In the *evidence-accuracy (EA) idiom*, direct evidence may be unreliable and must be quantified using the accuracy node. *Indirect hypothesis (IH) idioms* deal with the notions of *motive (IHM) and opportunity (IHO)*. These are typical cases with *indirect evidences (IE)*, i.e., proved through an intermediate inferential step that links the *final hypothesis (FH)* via a causal path of at least two steps (Fenton et al. 2013). The *alibi evidence (AE) idiom* offers a format for the case of mutually conflicting evidences, while special case of *EA idiom* uses the constraint node to represent *mutually exclusive hypothesis (MEH)*. Please see Fenton et al. (2013) for in depth description of the introduced BN legal idioms.

BN should capture dependencies between various hypothesis and evidences or lack thereof. For instance, if two indirect hypothesis are meant to be independent they should not be linked directly but through the final hypothesis. If they are meant to be directly dependent, additional arc should describe this dependency. The same applies to evidences, i.e., if they are independent they should not be linked directly. On the other hand, if the evidences are dependent under the same hypothesis, the first dependent evidence should influence the other dependent evidence(s) taking into account their mutual hypothesis (parent node).

This work introduces an *indirect consequence hypothesis (ICH) idiom*. *ICH* is a statement that describes forecasted future effects about a subject caused by *IE*. This idiom is necessary to represent forecast based on evidences and other hypothesis. For instance, *ICH* can describe forecasted negative effects on national security or potential dangers to asylum seeking migrants.

3 ASYLUM ADJUDICATION MODEL

As a first step to mitigate the difficulty of precise estimation of competing values during asylum adjudication cases, a conceptual BN model is proposed to represent asylum adjudication factors. Figure 1 shows adjudication factors divided into (1) national security relevant to a state, (2) dangers relevant to a migrant, (3) migrant motives and (4) decision and evaluation. Factors can have negative implication (red), positive implication (green), or can switch the direction of implication (blue). Golden color is used for decision and evaluation.

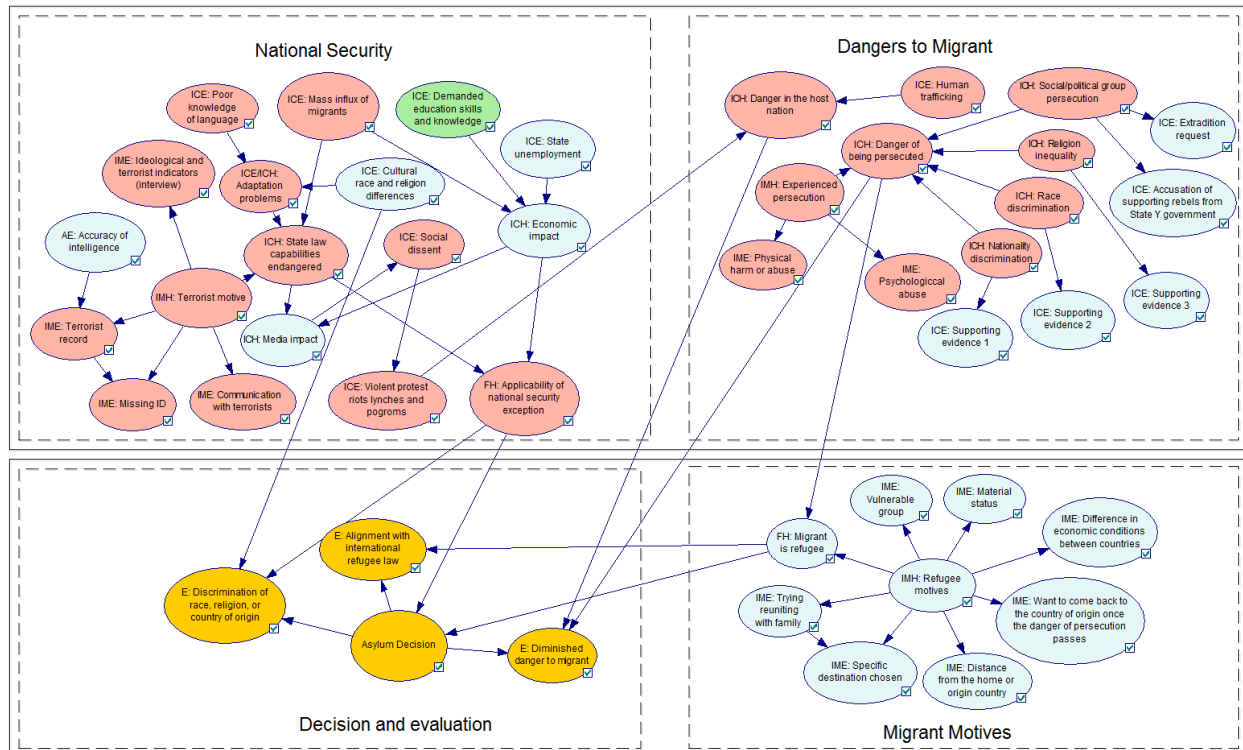


Figure 1: Asylum adjudication factors

3.1 National Security

In the first category, not only the national security concerns, which are the most important, but also all other actual and potential burdens to a state, its community and the interests of both, are situated. These factors are located in the National Security section of Figure 1. At stake can be all reasons for law (*ratio legis*) which prevent states from opening their borders to everybody. For instance, the substantiation of the Polish Statute on Foreigners 2013 project mentions three main situations when a refugee can cause an extra burden to a state: when he or she violates Polish law, poses a threat to the national security and public order, as well as when his or her stay entails provision of social assistance system services (2013). The national security related to migration problem was also a theme during presidential elections in US in 2016.

In order to objectively identify the relevant factors, it is not sufficient to confine to pointing the typical circumstances. It is also necessary to find any relevant causation. When violation of the domestic law constitutes a result of actions of the refugee aimed at mitigating to fulfil his obligations under the refugee law, such transgression does not only cause a burden to a state, but also proportionately diminishes the importance of need for protection of his or her rights as a refugee. The *terrorist motive* of a migrant can cause *state law capabilities endangered*. The evidence of *communication with terrorists*,

missing ID, ideological and terrorist indicators, and terrorist record increase the probability of *terrorist motive*. The accuracy of intelligence determines the strength of the evidence about migrant's *terrorist record*. The arc from *terrorist record* to *missing ID* describes a much higher likelihood of *missing ID* for migrants with *terrorist record*.

One should recall that art. 3 of the Refugee Convention prohibits any discrimination in application of this act based on *cultural, race and religion differences*. At the same time, it is evident that negative implications from the religious and cultural differences between the incoming migrants and the member states of the European Union are one of the strongest arguments of the politicians opposing unreasonable hospitality for the refugees. *Poor knowledge of language and cultural, race, and religion differences* can increase migrant's *adaptation problems*. However, the issue is extremely complicated. When the number of refugees becomes too high a state would no longer be able to enforce its laws with an acceptable efficiency the *mass influx of migrants* would cause the *state law capabilities endangered*. In such case, the refugees' own rights may be in danger. In the extreme situations, *social dissent* amplified by *media impact* could cause *violent protest, riots, lynchings, and pogroms*. There is a huge difference between the idea of supporting migrants and the possibilities of its implementation. If the state is not able to handle situation by applying exclusively means consistent with the Refugee Convention, the general principle of law: *impossibilium nulla obligatio est*, applies. And as the literature points, 'individualized refugee status determination and the granting of all the Convention rights can be practically impossible in the context of mass influx' (Feller and Klug 2013).

Next to it, also the negative or positive economic effects of an influx of refugees are important. The questions of possible significance are, for instance, what is the level of education, knowledge, and skills of a refugee in the context of job demand and state unemployment. *Economic impact* of a *mass influx of migrants* on a state will likely depend on the *state unemployment* and whether a migrant possesses *demanded education, skills, and knowledge*. All positive consequences that a state, its community and the interests of both, enjoys or potentially can enjoy from hosting a refugee (Long 2013) are less typical and require a detailed individual assessment. For example, the mere fact of economic migration may be good or bad for a state. The situation present within a state allows to answer whether a particular kind and number of immigrants can add any positive value to its social, economic or cultural life.

3.2 Dangers to Migrant

Dangers to migrants are located in the upper right corner of Figure 1. *Danger of being persecuted* in the migrant's home country represents the likelihood of persecution when a migrant is expelled, but *danger of migrants in the host nation* should also be considered, e.g., due to *violent protest, riots, lynchings and pogroms, and human trafficking*. The higher the danger to a security of a person who has a well-founded fear related to *danger of being persecuted* for reasons of *race discrimination, religion inequality, nationality discrimination, and social/political group persecution*, the higher the relative need for the protection of migrant's rights. Moreover, the model specifies two types of *experienced persecution*, i.e., *physical harm or abuse* and *psychological abuse*. As the current general considerations refer also to the application of art. 32 of the Refugee Convention, it is not necessary that this 'danger' falls within the scope of its art. 33 para 1. However, if this is the case, the need for protection of refugee can be best depicted by an observation from Klabbers (2013), who points that the non-refoulement principle is 'sometimes said to be *jus cogens*'. As an expulsion leads to complete withdrawal of the protection of a refugee, the given test should cover the circumstances enshrined in the very definition of who a '*refugee*' is. If the refugee belongs to a *vulnerable group* (children, disabled, elders), the need for protection of his or her rights is even higher. On the other hand, it is possible to look for circumstances diminishing or even completely denying the need for such protection, for instance those similar to the 'particularly serious crime' (with a *terrorist motive* in the model) exception from art. 33 para 2 of the Refugee Convention or the so-called 'attentat clauses' which appear in bilateral international agreements as a basis

for extraditing politically motivated murderers of political and state leaders (Góralczyk and Sawicki 2001).

3.3 Migrant Motives

The *migrant motives* can indicate if the *migrant is refugee* or rather an economic migrant. A *migrant is refuge* hypothesis depends on *danger of being persecuted* in the home or origin country and whether migrant has truthful *refugee motives*. Asylum officer should consider migrant's plans to settle permanently in a host country, transit to another country, or if he or she *wants to come back to the country of origin once the danger of persecution passes*. Also, the other individual characteristics such as ability to work, family status (Kay Hailbronner 2013), and *material status* are important. The *specific destination chosen* may be dependent on migrant *trying reunite with family*. Otherwise, a migrant without willingness to return when possible demonstrates the economic motive. The higher the *difference in economic conditions between countries* and the higher the *distance from the home or origin country*, i.e., between migrant's country and the country of refuge, the higher the indication of the economic reasons for migration. It is very plausible that migrants passing a few countries to get to a wealthier country does not seek refuge but wealth.

3.4 Decision and Evaluation

In the fourth part of the mode adjudication *asylum decision* and evaluation factors are placed. *Alignment with international refugee law* compares decision based on status of refugee (*migrant is refuge*), excluding all other factors. While the Refugee Convention requires an individual approach to the discussed cases, each potential refugee is inevitably perceived as a part of a *mass influx of migrants*. In order to objectively address these competing observations, it should be made clear that the immigrants of a certain race, religion or a country of origin are not authorized to hide behind the non-discrimination clause while posing a higher threat to the national security of a state in question. On the other hand, this clause does protect against an oversimplified approach, which transmits the responsibility for wrongful acts of a number of persons belonging to a particular racial, religious or national group, on other individuals from that group. It requires to undertake an individual final assessment, even if there are suspicions caused by the other members of a group. Host state reputation may be at stake if the *asylum decision* can be disputed on bases of *discrimination of race, religion, or country of origin*. *Discrimination of race, religion, or country of origin* evaluates the level of discrimination given the decision to grant asylum was denied while *cultural, race or religion differences* explain the *asylum decision*. This happens when probability of *applicability of national security exception* is near false, while *cultural, race, and religion differences* and *migrant is refugee* evaluates true with a high probability value.

Diminished danger of being persecuted is the main positive consequence that a refugee enjoys, or potentially can enjoy, by moving (or fleeing) to and staying in a particular state instead of remaining on other territory in question. Among them, we can distinguish (a) consequences which amount to fulfilment of the refugee law purposes and (b) positive consequences exceeding these purposes. Only the consequences from the group 'a' work in favor of the refugee, and they have already been indicated above. It is also possible that due to the crisis in the host country, the difference in the level of danger of being persecuted for illegitimate reasons would be insignificant when comparing to the country from which such person flees. In such a case, the relative value of the refugee's rights would be smaller. This is captured by *diminished danger* of being persecuted, which takes into account *danger of being persecuted* in the home or origin country, *dangers in the host nation*, and *asylum decision*. According to the preamble to the Refugee Convention, such purposes include assuring refugees the widest possible exercise of their fundamental rights and freedoms as well as addressing the social and humanitarian nature of the problem of refugees (Fiddian-Qasmiyeh et al. 2014). The consequences from a group 'b' indicate all the possible reasons why a refugee would benefit from moving to a country in question even when not being a refugee in the meaning of art. 1 of the Refugee Convention. A refugee does not benefit from the factors within

this group because there is no legitimate need for protection of such interests under the refugee law. The question whether, and if so, to what extent such factors are unfavorable to a refugee in terms of balancing exercise, depends on whether they entail a burden to the host state, i.e., the circumstances relevant to the National Security factors. For instance, *danger in the host nation* could be an indirect outcome of *violent protest, riots, lynchings and pogroms* spurred by *social dissent* and amplified by *media impact*, which could originate by the unconscious or purposeful abuse of benefits and privileges by refugees.

Once all of the above aspects are identified and assessed, such data enables domestic authorities to apply all the rules governing limitations of the refugee's rights and achieve a fair and just balance between the competing values. Notwithstanding the wide margin of appreciation awarded to the states, only the decision striking such balance can lay claim to be taken in a good faith and in accordance with the object and purpose of the international refugee law. Therefore, it can be said that the national security exception does constitute a legally measurable justification, but still is and will be invoked as an excuse for introducing the politics according to the will of current government. And as the history shows, 'success in humanitarian and legal protection of refugees depends on favorable political conditions and the good will of States' (Kugelmann 2010).

4 MODEL DEMONSTRATION

This section uses a possible, but not based on a true case, scenario to demonstrate the use of the model as a tool for quantifying boundaries of national security exception. The created for the purpose of this demonstration facts are presumably exact and final findings of the office processing the asylum application. Moreover, it is not possible to gather sufficient evidence on further details. Although the course of investigation is also governed by legal norms it is beyond the topic of this BN model and may be considered in the future work.

4.1 Scenario Evidences

26-year-old Mohammed is a fully fit father of a 7-year-old son. He is a very good car mechanic with technical education. Since his birth until recently, he had been living in the city of Z. His homeland, State Y, has been under civil war for over 5 years, producing a massive outflux of refugees. The city of Z is a major stronghold of the rebels, while Mohammed's family has been traditionally supporting the current government. A year ago, he had been widowed by his wife who died in a bombing along with all his immediate family except for his son. Three months before he decided to escape from Y another bombing injured him and destroyed the workshop where he worked. Knowing no immediate opportunities of other work in his profession he was compelled to start working for an acquainted trader at a bazaar. Selling fruit and vegetables barely allowed him to pay monthly rent for his flat and feed his son. A month before he decided to escape from Y the government instituted criminal proceedings, accusing him of disclosing classified information to the rebels. The reason for prosecution was his father, a former employee of the Ministry of Defence, who was forced to collaborate with the rebels occupying the city of Z. The Y's government was informed by its intelligence that the documents containing sensitive information were found by rebels at Mohammed's flat. Table 1 identifies a set of evidences related to the provided background information about Mohammed and his son.

Seeing no positive perspectives for life in a city being under constant threat, he spent most of his money on travel arranged by smugglers to get to one of EU country to be safe and improve his economic situation. He did not focus to get to a specific country as long as this was an EU country. Travelling with his son by a dinghy boat with a bag of clothes and only \$500 in his pocket, they luckily arrived to State X. Since more than a year State X has been experiencing mass influx of migrants. Although a part of EU State X has many internal problems, e.g., a high unemployment level and significant level of human trafficking. These problems impacted already high level of social dissent regarding migrants.

Table 1: Migrant background info

Factor	Evidence
ICE: Psychological abuse	TRUE
ICE: Physical harm or abuse	TRUE
IME: Trying reuniting with family	FALSE
IME: Material status	POOR
ICE: Accusation of supporting rebels from State Y government	TRUE

Mohammed's trade skills are in demand there, but he would have to learn the language of State X first to find a job. Two days after arriving at one of the X's islands and being settled in a refugee camp he filed an asylum application. He claimed a refugee status citing circumstances similar to what was subsequently found. Mohammed and his son have their original personal IDs from State Y. When asked about willingness to return to their homeland Mohammed said that if the danger of persecution ended they would consider returning to State Y. On the other hand, the high difference in economic conditions between States Y and X would likely affect his decision towards staying. Table 2 identifies a set of evidences related to the migration of Mohammed and his son.

Table 2: Migration to EU country

Factor	Evidence	Virtual Evidence
IME: Vulnerable group	TRUE	
IME: Missing ID	FALSE	
ICE: Social dissent		T = 0.8; F = 0.2
IME: Distance from the home or origin country		H = 0.2; L = 0.8
IME: Specific destination required?		T = 0.3; F = 0.7
IME: Want to come back to the country of origin once the danger of persecution passes		T = 0.4; F = 0.6
IME: Difference in economic conditions between countries	HIGH	
ICE: State unemployment	HIGH	
ICE: Demanded education skills and knowledge	TRUE	
ICE: Mass influx of migrants	TRUE	
ICE: Poor knowledge of language	TRUE	
ICE: Human trafficking	TRUE	

Three weeks after he filed an application for asylum the Y's intelligence informed X's authorities that a dinghy boat by which Mohammed and his son travelled carried also 20 other refugees including a person found by X to be a member of a terrorist group. This terrorist member tried to telephonically contact its cells in State F, which was discovered by X's police. Following an investigation, it turned out that Mohammed was aware of fundamentalist views of his co-passenger, as they spoke a lot about their faith and culture, which they wanted to practice after finding a place of refuge. Mohammed is a Muslim and his denomination is Wahhabism. Based on an accurate intelligence information Mohammed was not involved in any past terrorist activities. He would be likely to praise introduction of Sharia law and infringing fundamental rights of women to include forcible marriages. Although he did not support terrorist activities himself, when asked to openly reject terrorists during an interview his answers were evading and defensive. However, as he is concerned with taking care of his son and does not have any military training he is not likely to actively support or take part in criminal activity in a foreseeable future. Nevertheless, once he secures his own urgent needs, further contacts with radical Islamic acquaintances might encourage him to take part in terrorist activities. Upon providing information to X, the Y's government requested extradition of Mohammed citing need to investigate his role in disclosing classified information to the rebels. It is likely that Y's government tries to eliminate all possible threats. Table 3 identifies a set of evidences collected about Mohammed related to the additional security concerns as well as his danger of persecution by homeland State Y. *Danger of being persecuted* related to nationality, race, and religion are set to false because Mohammed did not report any of them when asked.

Table 3: Additional security and migrant danger evidences

Factor	Evidence	Virtual Evidence
IME: Communication with terrorists	TRUE	
IME: Terrorist record	FALSE	
AE: Accuracy of intelligence		T = 0.9; F = 0.1
IME: Ideological and terrorist indicators (interview)		T = 0.8; F = 0.2
ICE: Cultural and religion differences	TRUE	
ICE: Extradition request	TRUE	

4.2 Main Reasoning for Conditional Probability Tables (CPT) Setting

Based on the information from the scenario 21 nodes out of 46 nodes have set direct evidence, hence prior probabilities do not affect these nodes. In asylum cases, similarly to legal cases, absence of evidences can be mitigated based on a priori value of a factor, which can be further enhanced with, specific to a case, virtual evidence providing estimated posterior probability value of the factor. Please refer to Cain (2001), Nadkarni and Shenoy (2004), and Fenton and Neil (2011) to learn how to estimate CPTs.

Six nodes were set using prior probabilities enhanced with virtual evidences: *distance from the home or origin country*, *specific destination chosen*, *want to come back to the country of origin once the danger of persecution passes*, *demanding education skills and knowledge*, *accuracy of intelligence*, and *Social dissent*. This means that on top of prior probability values, which are normally based on statistical estimates or SMEs, additional, uncertain information, specific to a particular case, can modulate posterior probabilities into a direction set by a virtual evidence. For instance, a prior value for *accuracy of intelligence* is set to $T = 0.75$ and $F = 0.25$ and a virtual evidence is set to $T = 0.9$ and $F = 0.1$. This means that we had much better intelligence in this particular case as compared to generally acquired intelligence, which produced higher posterior probability of $T = 0.964$.

Asylum decision is granted when *migrant is refugee* is true and *applicability of national security exception* is false. *Discrimination of race, religion, or country of origin* is true when *asylum decision* is denied, *applicability of national security exception* is false, and *cultural and religion differences* is true. *Alignment with international refugee law* is true when *asylum decision* is granted, while *migrant is refugee* is true or when *asylum decision* is denied while *migrant is refugee* is false.

Danger of being persecuted is true if at least one persecution type is true. The influence of *experienced persecution* on *danger of being persecuted*, given that no other persecution types are set to true, is set to $T = F = 0.5$. The value of this influence should facilitate State's clear stance on experienced abuse vs. present dangers. Based on this stance *experienced persecution* on its own may or may not be sufficient without evidences relevant to the existing dangers of persecution listed by international refugee convention.

Applicability of national security exception is true when *State law capabilities endangered* is true regardless of value of *Economic impact*. When *applicability of national security exception* is false but *Economic impact* is negative presents more subjective situation. The used value of $T = F = 0.5$ should be tailored to specific economic situation of the host country.

Diminished danger is true in two cases: 1) when *asylum decision* is granted while *danger in the host nation* is false and *danger of being persecuted* is true, and 2) when *asylum decision* is denied while *danger in the host nation* is true and *danger of being persecuted* is false. The situation when both *danger in the host nation* and *danger of being persecuted* are true or false are set to $T = F = 0.5$ regardless of *asylum decision*.

Experienced persecution, *refugee motives*, and *social/political group persecution* are all set to $T = F = 0.5$, but in a real case these nodes would require using prior data based on the migrant's country. Finally, the authors estimated six CPT values: *adaptation problems*, *state law capabilities endangered*, *economic impact*, *danger in the host nation*, *media impact*, and *violent protest riots lynchings and pogroms*. When dealing with a real case these would have been derived by SMEs and other data sources (Cain

2001; Nadkarni and Shenoy 2004). Due to the space limitations the above CPTs could not fit into this paper but can be obtain from the authors.

4.3 Example of Model Use

The purpose of this example is to investigate sensitivity of prior probability of *terrorist motive* and its influence on *applicability of national security exception* and *asylum decision*. *Terrorist motive* was varied from 0.001 to 0.02 with a step of 0.002 producing 10 data points. These input values can be translated into an expected number of potential terrorists ranging from one per a thousand of migrants to two per a hundred of migrants. Triangular distribution was used to infuse variability to account for potential subjectivity of six estimated CPTs: *adaptation problems*, *state law capabilities endangered*, *economic impact*, *danger in the host nation*, *media impact*, and *violent protest riots lynchings and pogroms* and six CPTs of nodes with set virtual evidences: *distance from the home or origin country*, *specific destination chosen*, *want to come back to the country of origin once the danger of persecution passes*, *demanding education skills and knowledge*, *accuracy of intelligence*, and *social dissent*. The variability could also be imposed on virtual evidences but for this example it was not.

Figure 2 shows two levels of variability parameter $V = 0.1$ and $V = 0.2$ based on 2000 Monte Carlo runs at each input point of *terrorist motive*. For instance, when parameter is 0.1 it means that original CPT value (OCV) is replaced by value drawn from triangular distribution TRIANGULAR (OCV - 0.1, OCV, OCV + 0.1).

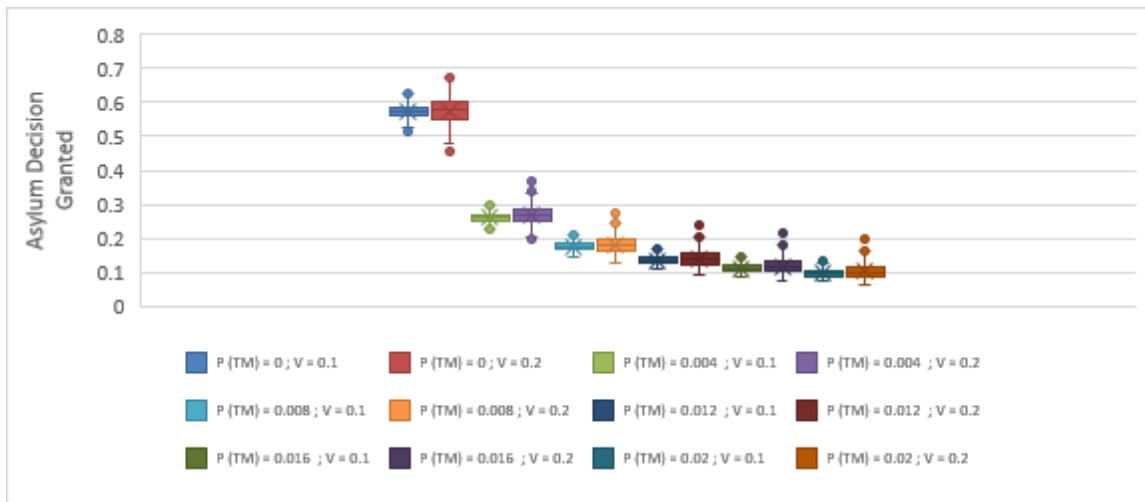


Figure 2: Influence of infused variability on *Asylum Decision* likely inconsistency

The variability of the output should be taken into account when making adjudication decision. It should include both uncertainty of collected data and subjectivity of SMEs or asylum officer who estimated CPTs.

Figure 3 shows dependency between probability of *applicability of national security exception* being true and probability of *asylum decision* being granted at each input point of *terrorist motive*.

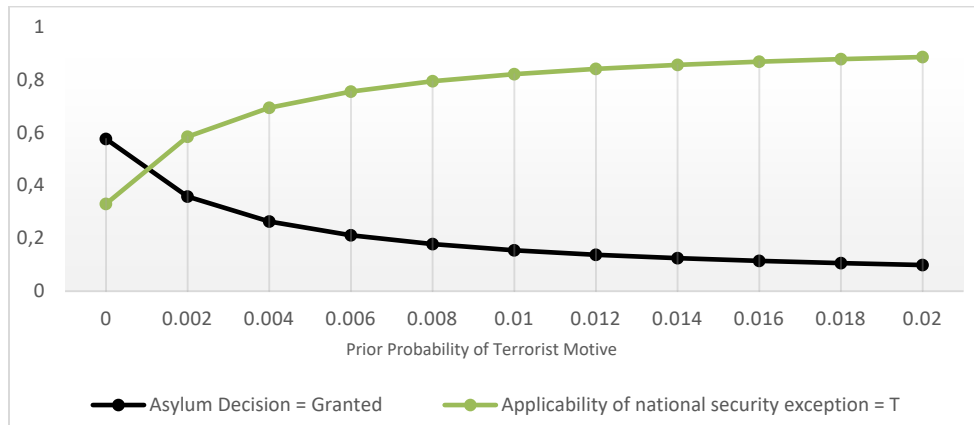


Figure 3: Influence of prior probability of *Terrorist Motive* on selected output factors

The graph demonstrates that *asylum decision* is closely dependent on *applicability of national security exception*, and it is very sensitive to changes in *terrorist motive*. *Asylum decision* granted ranges from 0.06 to 0.68, when varying prior probability of only a single input value. This shows challenges and moral dilemmas that asylum officers face when making adjudication decision, even when provided with many evidences as provided in this example.

5 FUTURE WORK

In order to balance national security and migrants rights it is possible to develop a model that can guide policy makers. Similar models should be considered for the use by asylum officers to be able to more effectively and objectively make asylum adjudication decisions. Future work should investigate the impact and sensitivity of *economic impact* and *refugee motives* as balancing factors to *applicability of national security exception*. Asylum officers representing state power (Weber 2005) may have a pro or anti migrants attitudes, influences, and experiences which should be also investigated. For instance a state high ranked officials can influence officer's political attitude towards asylum seekers, e.g., president's Lyndon Johnson welcoming asylum seekers from Cuba (Schräg 2000). Schoenholtz et al. (2014) suggested that the organizational culture of an office, including both director influence and supervisor influence, play a big role. For instance, different mixes of asylum officers and supervisors change the rate of granted cases based on their pro or anti refugee attitudes and experiences (Schoenholtz et al. 2014). Moreover, it is important is to develop new methods to collect accurate data be able and precisely interpret them.

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REFERENCES

1988. Case of Olsson V. Sweden. European Court of Human Rights, Strasbourg (Application no. 10465/83).
About Foreigners. 1526. 07/03/2013.
 Balaban, M. A. 2015. Credibility of Modeling and Simulation Via Triangulation. MODSIM World Conference and Expo, at Virginia Beach, Virginia.

- Barry-Murphy, E. C., and M. O. Stephenson. 2015. "Recognizing and Confronting State Subjectivity in Asylum Adjudications". *Refuge: Canada's Journal on Refugees* 31 (2).
- Cain, J. 2001. *Planning Improvements in Natural Resources Management*. Vol. 124, Centre for Ecology and Hydrology, Wallingford, UK
- Eurostat. 2017. "Asylum Statistics". http://ec.europa.eu/eurostat/statistics-explained/index.php/Asylum_statistics#Decisions_on_asylum_applications.
- Feller, E., and A. Klug. 2013. "Refugees, United Nations High Commissioner for Refugees (Unhcr)". *Max Planck Encyclopedia of Public International Law*.
- Fenton, N., and M. Neil. 2011. "Avoiding Probabilistic Reasoning Fallacies in Legal Practice Using Bayesian Networks". *Austl. J. Leg. Phil.* 36:114.
- Fenton, N., M. Neil, and D. A. Lagnado. 2013. "A General Structure for Legal Arguments About Evidence Using Bayesian Networks". *Cognitive science* 37 (1):61-102.
- Fiddian-Qasmiyeh, E., G. Loescher, K. Long, and N. Sigona. 2014. *The Oxford Handbook of Refugee and Forced Migration Studies*: OUP Oxford
- Fischer-Lescano, A., T. Löhr, and T. Tohidipur. 2009. "Border Controls at Sea: Requirements under International Human Rights and Refugee Law". *International Journal of Refugee Law*:eep008.
- Góralczyk, W., and S. Sawicki. 2001. "Prawo Międzynarodowe Publiczne". *LexisNexis wyd* 16.
- Greenwood, C. 2011. "Self-Defence". *MPEPIL* 9:103-113.
- Kay Hailbronner, J. G. 2013. Asylum, Territorial. In *Max Planck Encyclopedia of Public International Law [MPEPIL]*,
- Klabbers, J. 2013. "International Law". Cambridge University Press.
<http://dx.doi.org/10.1017/CBO9781139022569>.
- Kugelman, D. 2010. Refugees. In *Max Planck Encyclopedia of Public International Law [MPEPIL]*,
- Long, K. 2013. "When Refugees Stopped Being Migrants: Movement, Labour and Humanitarian Protection". *Migration Studies*:mns001.
- Maindonald, J. H. 2011. "Bayesian Artificial Intelligence, Second Edition by Kevin B. Korb, Ann E. Nicholson". *International Statistical Review* 79 (3):497-497.
- Nadkarni, S., and P. P. Shenoy. 2004. "A Causal Mapping Approach to Constructing Bayesian Networks". *Decision Support Systems* 38 (2):259-281.
- Schoenholtz, A. I., P. G. Schrag, and J. Ramji-Nogales. 2014. *Lives in the Balance: Asylum Adjudication by the Department of Homeland Security*: NYU Press
- Schräg, P. G. 2000. *A Well-Founded Fear: The Congressional Battle to Save Political Asylum in America*. New York: Routledge Publishers
- Shaw, M. N. 2008. *International Law*. Cambridge: Cambridge University Press
- UN. 1951. "Convention Relating to the Status of Refugees". *United Nations, Treaty Series* 189:137.
- Weber, C. 2005. *Simulating Sovereignty: Intervention, the State and Symbolic Exchange*. New York: Press Syndicate of the University of Cambridge

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