Swab Before You Enter: DNA Collection and Immigration Control

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In the spring of 2019, the United States Department of Homeland Security ("DHS") announced that it would start conducting DNA tests at the border to identify fraudulent claims regarding family ties. Later, in January 2020, DHS started to collect DNA samples from persons in immigration detention. This article examines these measures in their comparative global contexts and argues that the slow but persistent growth in the use of DNA testing in immigration control in the United States and in other countries epitomizes some of the agreessive and exclusionary facets of immigration law: that it is increasingly privatized, relies on the application of political power on the bodies of migrants ("biopower"), and suffers from increased racialization and hyper-individualization. DNA testing should not be regarded as a unique or extreme measure, but rather as the convergence of multiple concerning aspects of immigration enforcement, which, despite the human rights violations they entail, have become normalized and are used in multiple Western democracies.

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Introduction

In the spring of 2019, DHS began conducting DNA tests at the border to identify cases of smuggling, trafficking, and fraudulent claims regarding family ties.² This measure was mostly applicable to populations of asylum seekers and migrants entering the United States without documentation. In the fall of 2019, DHS subsequently announced an intention to collect DNA samples from persons in immigration detention.³ This decision applies not only to asylum seekers and undocumented entrants, but also to persons authorized to enter the United States. The United States Immigration and Customs Enforcement ("ICE") and the United States Customs and Border Protection ("CBP") began implementing the decision in early January 2020. Proposals currently pending suggest expanding the authority to require the collection and storage of DNA samples to substantiate claims about genetic relationships.⁴

In dozens of countries today, immigrants of different kinds—asylum seekers and refugees, family migrants, migrant workers, and others—are sometimes asked or required to undertake DNA tests during different stages of their migration process. These measures should be viewed in context. First, DNA collection is one of the latest technologies employed by a variety of countries that are increasingly interested in border enforcement. DNA collection is one of many methods of border control that many countries, including the United States, have utilized in an attempt to tame migration and assert control over population movements to their territories.⁵ The use of

² See Priscilla Alvarez & Geneva Sands, Exclusive: DHS to Start DNA Testing to Establish Family Relationships on the Border, CNN (May 1, 2019), https://www.cnn.com/2019/04/30/politics/homeland-security-dna-testing-immigration/index.html?fbclid=IWAR 2Ei87k9BKV3ui2mx_HMj0tE27k_m0gLO-dgbErcy987AB4huG-8fVaL3M, archived at https://perma.cc/C3N7-49MS.

³ See DNA-Sample Collection from Immigration Detainees, 84 Fed. Reg. 56397 (Oct. 22, 2019), https://www.federalregister.gov/documents/2019/10/22/2019-22877/dna-sample-collection-from-immigration-detainees, archived at https://perma.ccUL9R-MAJL [hereinafter DNA Sample Collection Regulations]; see also Caitlin Dickerson, U.S. Government Plans to Collect DNA from Detained Immigrants, N.Y. TIMES (Oct. 2, 2019), https://www.nytimes.com/2019/10/02/us/dna-testing-immigrants.html, archived at https://perma.cc/ZL8U-A59Z.

⁴ See Collection and Use of Biometrics by U.S. Citizenship and Immigration Services, 85 Fed. Reg. 56338 (proposed Sept. 11, 2020), https://www.federalregister.gov/documents/2020/09/11/2020-19145/collection-and-use-of-biometrics-by-us-citizenship-and-immigration-services?ct=T(Press_Release_9-3-20_COPY_01), archived at https://perma.cc/33NX-BY2K.

⁵ For a review of the U.S. border policy measures in the first eighteen months of the Trump Administration, see Shoba S. Wadhia, Banned: Immigration Enforcement in the Time of Trump (2019); see also Priyanka Boghani, A Guide to Some Major Trump Administration Immigration Policies, PBS (Oct. 22, 2019), https://www.pbs.org/wgbb/frontline/article/a-guide-to-some-major-trump-administration-immigration-policies/, archived at https://perma.cc/YJD9-VEN7. For the U.K. border control regime, see, e.g., Richard Tutton et al., Importing Forensic Biomedicine into Asylum Adjudication: Genetic Ancestry and Isotope Testing in the United Kingdom, in Adjudicating Refugee and Asylum Status: The Role of Witness, Expertise and Testimony 202, 204–08 (Benjamin N. Lawrence & Galya Ruffer eds., 2015). For additional European examples of changes in the direction of a more restrictive border policy, see Soraya Sarhaddi Nelson, Hungary Closes Borders to Most Asylum Seekers,

these mechanisms has constantly increased in recent years. DNA has become yet another form of vetting at the border.

Second, migration processes are increasingly privatized. The examination of DNA samples requires biotechnological expertise which governments often do not have, and thus they are forced to outsource this service to private laboratories. Privatization increases the costs of immigration, since migrants have to bear the costs of the tests. It also compromises migrants' rights, given that private companies are not committed to upholding human rights and face less external pressure to do so. Finally, this massive reliance on private power has implications for the notion of sovereignty, as it means that what was previously considered public power has been transferred to private hands.

Third, DNA testing is used to coerce and subjugate migrants' bodies, increasingly in the name of making inclusionary/exclusionary decisions. Globally, immigration regimes have been collecting DNA samples for several decades now. In addition, various countries, including the United States, have collected other pieces of biometric information about migrants, including fingerprints, iris scans, and facial scans.⁸ Some of these forms of biometric information have been collected, stored, and used by non-state entities

Human Rights Advocates Say, NPR (Feb. 5, 2018), https://www.npr.org/2018/02/05/583279145/hungary-closes-borders-to-most-asylum-seekers-human-rights-advocates-say, archived at https://perma.cc/53NW-4YCV; see also Willa Frej, Here Are The European Countries That Want to Refuse Refugees, HuffPost (Sept. 9, 2015), https://www.huffingtonpost.com/entry/europe-refugees-not-welcome_us_55ef3dabe4b093be51bc88 24, archived at https://perma.cc/57FU-AYSF; Belgrade Center for Human Rights et al., A Dangerous 'Game': The Pushback of Migrants, Including Refugees, At Europe's Borders (2017), https://www.oxfam.org/sites/www.oxfam.org/file_attachments/bp-dangerous-game-pushback-migrants-refugees-060417-en_0.pdf, archived at https://perma.cc/TY84-FNPC; Lorne Waldman & Audrey Macklin, Why We Can't Turn Away the Tamil Ships, The Globe & Mail (May 2, 2018), https://www.theglobeandmail.com/opinion/why-we-canturn-away-the-tamil-ships/article1377276/, archived at https://perma.cc/QJS9-ZSBK. On the general tendency of closing the border in Europe, see, e.g., Annette Jünemann et al., Fortress Europe? Challenges and Failures of Migration and Asylum Policies (2017).

⁶ See, e.g., U.S. Immigr. & Customs Enf't, ICE Awards New Contract for Rapid DNA Testing at Southwest Border, Expands Pilot Program (June 18, 2019), https://www.ice.gov/news/releases/ice-awards-new-contract-rapid-dna-testing-southwest-border-expands-pilot-program, archived at https://perma.cc/U5P6-VTBS (discussing U.S. reliance on private laboratories for analyzing the DNA testing of migrants); Sarah Abel, What DNA Can't Tell: Problems with Using Genetic Tests to Determine the Nationality of Migrants, 34 Anthropology Today, Dec. 2018, at 3 (discussing Canada's reliance on direct-to-consumer genetic ancestry tests).

⁷ See Tally Kritzman-Amir, Privatization and Delegation of State Authority in Asylum Systems, 5 LAW & ETHICS HUM. RTS. 193, 193–15 (2011); see also Tendayi Bloom, The Business of Migration Control: Delegating Migration Control Functions to Private Actors, 6 GLOB. POLY 151, 151 (2014); Tendayi Bloom, The Business of Noncitizenship, 19 CITIZENSHIP STUD. 892, 892 (2015).

⁸ See, e.g., Jennifer Lynch, From Fingerprints to DNA: Biometric Data Collection in U.S. Immigrant Communities and Beyond 7 (2012), https://www.eff.org/document/fingerprints-dna-biometric-data-collection-us-immigrant-communities-and-beyond, archived at https://perma.cc/MHF4-Y75T (describing the use of biometric data collection on the U.S. population, including for immigrants). For another example, on the use of iris scans for identification of refugees by the United Nations High Commissioner for Refugees, see Katja Lindskov

such as the United Nations High Commissioner for Refugees in their efforts to provide assistance and protection to refugees. Notably, out of all of the biometric methods, DNA testing is considered to be the least efficient at actually identifying people at a minimal cost. Nevertheless, more recently, DNA tests have been used in new and different circumstances. While in other contexts biometric information was arguably collected to promote the welfare of migrants, the recent efforts to collect DNA have mostly been geared towards informing inclusionary and exclusionary decisions.

A Foucauldian "biopower" analysis helps makes sense of the state's practice of using bodily findings to ground inclusionary/exclusionary decisions. Biopower is the practice of modern nation states regulating their subjects through "an explosion of numerous and diverse techniques for achieving the subjugations of bodies and the control of populations." It is integral to immigration control and operates in multifaceted ways. ¹⁴ The DNA tests represent a focus on the body as a source of information for inclusion or exclusion, and thus as a place where states' coercive power is applied. As Fassin and D'Halluin argue, albeit in a slightly different context, "[t]he refugee's body . . . becomes the place of an inscription . . . : an inscription of power, through the persecution they suffered in their home country, and an inscription of truth" ¹⁵ I would argue that inscription of power and truth are mixed in receiving countries, which derive truth-statements from the body, and in the process apply coercive force on the migrants.

Fourth, DNA tests raise fundamental privacy concerns. Privacy is a fundamental right which is perceived as a privilege (at most) when it comes to migrants and asylum seekers. They are "expected to unveil themselves, to recount their histories, and to exhibit their wounds," both through their oft-doubted stories and documents, but also through their DNA. DNA tests can provide information about their ancestry, but also about medical conditions

Jacobsen, Experimentation in Humanitarian Locations: UNHCR Biometric Registration of Afghan Refugees, 46 Sec. Dialogue 144, 144 (2015).

⁹ See Achraf Farraj, Refugees and the Biometric Future: The Impact of Biometrics on Refugees and Asylum Seekers, 42 Colum. Hum. Rts. L. Rev. 891, 892, 902–05 (2011).

¹⁰ *Id.* at 895.

¹¹ See, e.g., U.S. Immigr. & Customs Enf't, supra note 6 (describing the U.S. plan to expand DNA testing at the border); Richard Tutton et al., Suspect Technologies: Forensic Testing of Asylum Seekers at the UK Border, 37 ETHNIC & RACIAL STUD. 738, 749 (2014) (describing the U.K. pilot exploring the possibility of using genetic testing to determine country of origin).

¹² See Farraj, supra note 9, at 941.

 $^{^{13}}$ Michel Foucault, The History of Sexuality: An Introduction 139–40 (Robert Hurley trans., 1990).

¹⁴ See, e.g., Tally Kritzman-Amir & Anda Barak-Bianco, Food as a Biopower Means of Control: The Use of Food in Asylum Regimes, 45 Am. J. L. & Med. 57, 57–61 (2019) (arguing that food is used as a means of control over immigrants).

¹⁵ See Didier Fassin & Estelle D'Halluin, The Truth from the Body: Medical Certificates as Ultimate Evidence for Asylum Seekers, 107 Am. Anthropology 597, 598 (2005).

¹⁶ *Id.* at 606.

and other characteristics, some of which may not even be known to the persons themselves. This raises questions about the ways their information is accessed and stored, for which purposes it may be used, and how any privacy concerns could be alleviated.

Fifth, DNA tests are evidence of the racialization of migration. DNA testing of immigrants occurs in a world in which access to movement is differentiated, in part, along racial lines. Given that testing is applied differently to people from different racial origins, this practice contributes to the further racialization of international migration.¹⁷

Sixth, DNA tests are representative of the methodological hyper-individualization of immigration law. Reliance on DNA testing for various immigration determinations further constitutes the migrant as the "impersonal other," and focuses on the migrant as an abstract, detached individual instead of looking at the migrant in a contextual, relational manner, and instead of attributing agency, subjectivity, relatability, and rights to the migrant.¹⁸ The focus on DNA, at the expense of also considering the migrant's relationships, history, etc., is proof of an "overindividualized corporeality."19 Because of the constant suspicion of migrants' testimonies, behaviors, and evidence, because their "word is systematically doubted, it is their bodies that are questioned."20 The growing reliance on bodily testing de-subjectifies migrants.²¹ The quest for the "ultimate" biological evidence limits the ability of an immigration regime to capture the humanity of migrants, which includes their relationships, networks, and complex emotions and motivations. This dehumanization results in a narrower and less comprehensive understanding of immigrants and therefore in an immigration system that is founded on incomplete and distorted premises.²²

This paper illustrates just how widespread DNA testing has become over the years, suggesting that it is now part of the ordinary measures of immigration and asylum regimes. Rather than looking at DNA tests as an extreme measure, this paper argues that the slow but persistent growth in the use of DNA testing in immigration control epitomizes some of the current characteristics of immigration law: it is increasingly privatized, relies on the application of political power on the bodies of migrants ("biopower"), suffers from increased racialized exclusion, and hyper-individualizes migrants

¹⁷ On the inequality in access to global mobility, *see*, *e.g.*, Thomas Spijkerboer, *The Global Mobility Infrastructure: Reconceptualising the Externalisation of Migration Control*, 20 Eur. J. Migration & L. 452, 458, 467–68 (2018). On the racialization of international migration, *see*, *e.g.*, Rogelio Sáenz & Karen Manges Douglas, *A Call for the Racialization of Immigration Studies: On the Transition of Ethnic Immigrants to Racialized Immigrants*, 1 Socio. Race & Ethnicity 166, 166 (2015).

 $^{^{18}}$ See Tally Kritzman-Amir, The Methodology of Immigration Law, 60 Va. J. Int'l. L. 651, 692–93 (2020).

¹⁹ Fassin & D'Halluin, *supra* note 15, at 606.

²⁰ Id. at 598.

²¹ See id

²² See Kritzman-Amir, supra note 18, at 34-35.

while ignoring their social context. The hyper-individualistic and scientific nature of DNA testing in particular creates a veneer of respectability and "objectivity" that may disguise the complex and sometimes devastating implications of these measures on migrants, as well as their implications for the changing nature of sovereignty and sovereign power in immigration law. Sovereignty has served as a justification for immigration control, and the heavy reliance on DNA testing represents a shift from limiting or allowing the immigration of individuals based on the exercise of sovereign discretion to making determinations on the basis of "scientific" fact-finding. In that sense, this article diverges from the existing literature on the DNA testing of immigrants in that it does not treat DNA testing as an extreme measure, but rather as the convergence of multiple concerning trends in immigration enforcement, which, despite the human rights violations they entail, have become the norm in multiple Western democracies.

Part I of the paper describes the use and purposes of DNA testing in Western democracies and demonstrates how DNA testing is emblematic of many aspects of contemporary immigration and asylum regimes. Part II analyzes migrant DNA testing in the context of privatization within immigration regimes. Part III details both the biopolitical and privacy implications of the tests, and Part IV exposes the racial prejudice underlying them. Part V explains how these tests fit within the hyper-individualized operation of immigration control and serve the ultimate purpose of population management, thereby carrying a heavy price in terms of migrants' rights. Part VI concludes with an evaluation of the practice of DNA testing.

I. A Comparative Analysis

DNA testing of immigrants is used for several explicit and implicit purposes. This section will describe the various alleged purposes of DNA testing of immigrants in multiple countries.

A. Proof of Kinship and Family Reunification

First, DNA is used to determine kinship and prove family ties in the course of considering applications for family reunification. This is the case in more than 20 countries and is one of the oldest and most common reasons for the DNA testing of immigrants.²³

The *United States* has used DNA tests to prove kinship in family reunification processes since July 14, 2000.²⁴ This program was initiated after Michael D. Cronin, who at the time was Executive Associate Commis-

²³ See Palmira Granados Moreno et al., Does the End Justify the Means? A Comparative Study of the Use of DNA Testing in the Context of Family Reunification, 4 J. L. & THE BIOSCIENCES 250, 250–81 (2017).

²⁴ Sarah Morando Lakhani & Stefan Timmermans, *Biopolitical Citizenship in the Immigration Adjudication Process*, 61 Soc. Probs. 360, 370 (2014); Llilda P. Barata et al., *What*

sioner of the United States Citizenship and Immigration Services ("USCIS"), issued an administrative memorandum providing guidance on the use of DNA tests.²⁵ The memorandum treats DNA tests as irrefutable evidence of kinship, though it recognizes that they are not 100% conclusive.²⁶ The results of such DNA tests are seldom challenged in court.²⁷

While tests are generally not required, with the exception of certain relatively uncommon family member applicants,²⁸ they are often the only choice for persons wishing to pursue family reunification applications whose documents are not accepted as credible²⁹ or who struggle to obtain documents.³⁰ This can be an efficient way of expediting the process, given that processing DNA samples is typically quicker than having the immigration officers review documents. Immigration officers may use their discretion to offer testing to individuals who are applying for family reunification "in situations where credible evidence is insufficient to prove the claimed biological relationship."³¹

The applicant bears the cost of the test, which may vary depending on the laboratory that processes the DNA and the number of family members being tested.³² To cover the costs, some applicants must save for a long time or borrow funds from friends and relatives.³³ It is often the case that USCIS requires samples to be collected in a United States consulate or embassy, and then sent to a laboratory in the United States for testing. This requirement can increase the total price by adding travel and shipment costs, and result in samples being delayed, lost, or compromised.³⁴

Then, on April 30, 2019, DHS announced a DNA testing pilot program to establish family relations at the border in order to "target human smuggling," "prevent children from being exploited by traffickers," and prevent immigrants from "creating fake families" or "recycling children." This is

DNA Can and Cannot Say: Perspectives of Immigrant Families About the Use of Genetic Testing in Immigration, 26 Stan. L. & Pol'y Rev. 597, 603 (2015).

²⁵ See Barata et al., supra note 24, at 603-04.

²⁶ See id. at 604.

²⁷ Id.

²⁸ Those "priority three applicants"—"unmarried children under twenty-one years of age and parents of persons (called an anchor relative) lawfully admitted to the United States as refugees or asylees or permanent residents, or U.S. citizens who previously had refugee or asylum status"—must "undergo DNA testing to prove they are genetically related to the anchor relative." Edward S. Dove, *Back to Blood: The Sociopolitics and Law of Compulsory DNA Testing of Refugees*, 8 U. Mass. L. Rev. 466, 468 (2013).

²⁹ See Lakhani & Timmermans, supra note 24, at 370–71.

³⁰ See Barata et al., supra note 24, at 614 (mentioning the difficulties refugees may face in obtaining documents, if they fled their countries without obtaining them in advance, and where countries of origin do not maintain well-organized population registries).

³¹ *Id.* at 602.

³² See id. at 615.

³³ See id. at 604, 615-16.

³⁴ See Lakhani & Timmermans, supra note 24, at 371.

³⁵ Alvarez & Sands, supra note 2.

³⁶ This phrase refers to an allegation that people send their children back to accompany non-relatives as they enter the United States, in order to help them evade immigration deten-

despite the fact that the actual percentage of persons who have committed fraud is miniscule.³⁷

Critics argue that this announcement was "dangerous" because even if the testing reveals a child to have no biological relationship with the accompanying adult, that does not necessarily prove they are not related; they can be related despite not having biological ties.³⁸ Therefore, it is impossible to assume that smuggling or trafficking has occurred based on the findings of DNA tests.³⁹ In addition, testing in this way could discourage non-relatives from accompanying child migrants, resulting in more children migrating without an accompanying adult, despite the fact that it is usually safer for children to be accompanied.⁴⁰ Additional critiques address the potential harm to children after officials detect that a child was accompanied by a nonrelative: namely a problematic deportation or separation from the accompanying adult. 41 In other words, critics emphasize that while the value of the whole practice of collecting DNA could be contested, its particular implications for the rights of migrants, and children specifically, are exceptionally stark. Despite this critique, in June 2019, DHS announced that the pilot program was going to be expanded, and has since implemented this decision.⁴²

Canada has also used DNA in family reunification applications since the 1990s, though only in particular circumstances. According to guidelines issued by the Department of Citizenship and Immigration Canada ("CIC"),⁴³ such tests are only to be used as a last resort to verify kinship for family reunification applications when there are no available documents to prove kinship or when authenticity of documents cannot be verified.⁴⁴ While the cost of testing has decreased over time, it remains high and is borne by the

tion. Megan Molteni, *How DNA Testing at the US-Mexico Border Will Actually Work*, WIRED (May 2, 2019), https://www.wired.com/story/how-dna-testing-at-the-us-mexico-border-will-actually-work/, *archived at* https://perma.cc/RHY6-2Z3P (quoting former DHS Secretary Kirstjen Nielsen).

³⁷ See id. The report suggests that the number of fraudulent cases is below 1%, and perhaps even around 0.5%, and that the number of cases of suspected fraud are much higher than those of actual fraud. See generally Tally Kritzman-Amir & Jaya Ramji-Nogales, Nationality Bans, 2019 U. Ill. L. Rev. 564, 564–71 (2019).

³⁸ See Dina Francesca Haynes, *DNA Testing at the Border is Dangerous*, The Hill (May 3, 2019), https://thehill.com/opinion/immigration/442050-dna-testing-at-the-border-is-dangerous, *archived at* https://perma.cc/UHC3-H39X.

³⁹ See id.

⁴⁰ See id.

¹¹ See id.

⁴² See U.S. Immigr. & Customs Enf't, supra note 6.

⁴³ See Gov't of Canada, DNA Testing, https://www.canada.ca/en/immigration-refugees-citizenship/corporate/publications-manuals/operational-bulletins-manuals/standard-require-ments/dna-testing.html, *archived at* https://perma.cc/YG25-XP7R (last modified Jan. 23, 2019).

⁴⁴ See id.; see also Yann Joly et al., DNA Testing for Family Reunification in Canada: Points to Consider, 18 INT'L MIGRATION & INTEGRATION 391, 397–99 (2017) (providing suggestions on how to ensure that Canada indeed uses DNA tests as a last resort).

applicants. At times, the high cost has prevented family reunification when applicants could not afford to pay for the tests.⁴⁵

Genetic testing has also increasingly become a main way for migrants to prove familial relationships in more than a dozen European countries. In some cases this is because immigration authorities require it, but more often it is because the migrants themselves wish to "overcome suspicion of their narrative." Heats have been used in the United Kingdom since as early as 1985, and then spread to other countries, such as Finland and France, in the 1990s. In several of these European countries, the tests are meant to be used as measures of last resort. Nonetheless, their use has increased, and the practice has become so widespread that it can no longer be viewed as exceptional. Refusing to be tested might feed the suspicions of the authorities, who may assume that the refusal indicates an attempt to hide something. European Union norms offer little guidance on the use of DNA tests in family reunification cases. Practices regarding the DNA testing of immigrants vary significantly among European countries.

Germany has used genetic testing of migrants and refugees for family reunification purposes since 1992, but only since 2010 has the Genetic Diagnosis Law (gendiagnostikgesetz) included a section regulating this practice.⁵⁴

⁴⁵ See Joly et al., supra note 44, at 397, 399.

⁴⁶ David Škinner, *Race, Racism and Identification in the Era of Technosecurity*, 29 Sci. As Culture 1, 8 (2018). According to Skinner, 16 European countries rely on DNA testing, although Heinemann and Lemke found that in 2014, 17 European countries and at least 4 others were using these tests. *See* Torsten Heinemann & Thomas Lemke, *Biological Citizenship Reconsidered: The Use of DNA Analysis by Immigration Authorities in Germany*, 39 Sci., Tech. & Hum. Values 488, 493 (2014); *see also* Martin Weiss, *Strange DNA: The Rise of DNA Analysis for Family Reunification and its Ethical Implications*, 7 Genomics, Soc'y & Pol'y 1 (2011).

⁴⁷ Torsten Heinemann et al., *Constellations, Complexities and Challenges of Researching DNA Analysis for Family Reunification: An Introduction, in Suspect Families: DNA Analysis, Family Reunification and Immigration Policies 1, 1 (Torsten Heinemann et al. eds., 2015).*

⁴⁸ See Anna-Maria Tapaninen & Ilpo Helen, Finland: Securing Human Rights, Suspecting Fraud, in Suspect Families: DNA Analysis, Family Reunification and Immigration Policies 33, 33 (Torsten Heinemann et al. eds., 2015).

⁴⁹ Such is the case in Australia, Canada, and Finland. *See, e.g.,* J. Taitz et al., *The Last Resort: Exploring the Use of DNA Testing for Family Reunification,* 6 Health & Hum. Rts. 21, 25 (2002). Nevertheless, in Austria, for example, DNA tests are suggested, according to the findings of interviews, to people with adequate documents, and are sometimes followed by requests for additional documentation, so they often actually occur in the middle of examinations, neither as a measure of last resort nor as a determinative measure. *See* Kevin Hall & Ursula Naue, *Austria: DNA Profiling as a Lie Detector, in Suspect Families: DNA Analysis, Family Reunification and Immigration Policies* 55, 76–77 (Torsten Heinemann et al. eds., 2015). On using the tests as a measure of last resort in the United States, *see* Dove, *supra* note 28, at 471.

⁵⁰ See Taitz et al., supra note 49, at 25–26.

⁵¹ See, e.g., Encarnación La Spina, DNA Testing for Family Reunification in Europe: An Exceptional Resource?, 6 MIGRACIONES INTERNACIONALES 39, 41–42 (2012).

⁵² See Heinemann & Lemke, supra note 46, at 501.

⁵³ See Heinemann et al., supra note 47, at 4-6.

⁵⁴ See Heinemann & Lemke, supra note 46, at 500.

Applicants are merely offered the possibility of taking the test, but since the burden of proof is on them, they typically need to take the test to support their claim.⁵⁵ The costs of the test are borne by the applicants.⁵⁶ The process can be three times shorter if supported by a DNA sample rather than by a set of documents, so lawyers often recommend it as a more efficient course of action.⁵⁷

In the case of South Korea, Chinese citizens who are ethnically Korean, and who are trying to migrate to South Korea, often rely on DNA testing to prove their Korean kinship in the absence of official documents attesting to their identity.⁵⁸ Instead of being individualistic, population registries in China are based on households (broadly speaking, not families) and the Chinese authorities often make these registry documents difficult to access, thus making it a struggle for many Korean Chinese to prove their Korean kinship.⁵⁹ In addition, many individuals experience the process of accessing these documents—which can involve requests for evidence, interviews, and a heavy reliance on bureaucratic discretion—as anxiety-provoking, prolonged, and arbitrary. 60 Bureaucrats see DNA tests as an efficient alternative, since they are much more rapid than accessing and examining numerous documents, and they are perceived as impervious to fraud.⁶¹ The applicants themselves also see them as advantageous, as DNA tests reduce waiting times, and constitute a strategy to establish trustworthiness in an atmosphere of suspicion.62

DNA tests are also used in family reunification applications in *Israel*, following a court order.⁶³ In cases where non-national mothers and their children are applying for status in Israel on the basis of a relationship with an Israeli citizen or resident father, Israel may require that applicants take DNA tests when there is a lack of sufficient or convincing evidence proving the existence of a family unit.⁶⁴ Such DNA tests are necessary because the law requires a paternity determination when the father is the family member

⁵⁵ See id. at 496.

⁵⁶ See id. at 496–97.

⁵⁷ See id. at 497.

⁵⁸ See Jaeeun Kim, Establishing Identity: Documents, Performance, and Biometric Information in Immigration Proceedings, 36 L. & Soc. Inquiry 760, 771–72 (2011).

⁵⁹ *Id.* at 769–70.

⁶⁰ See id. at 771.

⁶¹ See id. at 771-72.

⁶² See id. at 772.

⁶³ See § 11, Genetic Information Law, 5761–2000, SH 1766, 62, 65 (Isr.), https://www.nevo.co.il/Law_word/law14/law-1766.pdf, archived at https://perma.cc/KM2X-BASF.

⁶⁴ THE MINISTRY OF INTERIOR OF THE GOV'T OF ISRAEL, THE PROCEDURE FOR GRANTING STATUS TO CHILDREN WHO WERE BORN IN ISRAEL THROUGH PATERNITY RECOGNITION, https://www.gov.il/BlobFolder/policy/procedure_for_granting_the_status_of_minors_by_acknow ledging-paternity/he/5.2.0004.pdf, archived at https://perma.cc/2DZU-DXJE; see also, Genetic Information Regulations (Conducting Genetic Testing of Family Ties, Documentation and Saving Its Results), 5770-2010, https://www.nevo.co.il/law_html/Law01/500_367.htm, archived at https://perma.cc/8AAZ-DVR8. This requirement was upheld by the Israeli High Court of Justice in HCJ 10533/04 Weiss v. The Minister of Interior, 64(3) PD 807 (2011) (Isr.).

whose nationality anchors the family reunification application. DNA tests are generally not required when the mother is an Israeli national.

Critics have argued that this process of DNA testing in family reunification is problematic and potentially a violation of human rights. The nature of the tests is often unclear to those tested;⁶⁵ results in indignation of the migrants; breaches their privacy; constitutes a form of interference with their family life; impacts their most intimate relationships; violates the principle of proportionality; carries a heavy monetary cost; and is discriminatory.⁶⁶ From a scientific point of view, critics argue that relying on the tests may result in mistakes, since the tests do not definitively establish genetic ancestry, but rather indicate an approximation of genetic relations.⁶⁷ Despite the critique, it should be mentioned that in some situations, some migrants find the tests advantageous, especially in light of the growing exclusionary tendencies of immigration bureaucracies (for example, some of the Chinese migrants to Korea discussed above).

B. Proof of Identity, Citizenship, or National Origin

Another purpose of DNA testing in the immigration context is to establish migrants' identity, citizenship, or national origin. This is done either before or upon entry, or in the later stages of the process, after their immigration.

From 2009 to 2010, the *United Kingdom* conducted a pilot initiative called the "Human Provenance Pilot Project" ("HPPP"), which aimed to identify the nationality of asylum seekers through genetic testing. The HPPP was heavily criticized, and ultimately the government discontinued it after a few months. Contextualizing this project within the increasing focus of UK border control on deterring asylum seekers from entering the country,⁶⁸ Tutton, Hauskeller, and Sturdy characterize the project as consistent with the hermeneutics of suspicion.⁶⁹ In this interpretation, asylum seekers are assumed to be deceitful,⁷⁰ and "objective" scientific evidence collected through the DNA testing is seen as an attractive alternative to individual testimonies and evidence. For instance, one of the goals of the HPPP was to differentiate "true" Somali asylum seekers from Kenyans who were claiming to be Somali in an effort to receive refugee protection that was more likely to be afforded to Somalis at the time. Notably, the ability of DNA tests to identify nationality is severely limited; at most it can identify tribal mem-

⁶⁵ See Barata et al., supra note 24, at 618.

⁶⁶ See La Spina, supra note 51, at 51–53.

⁶⁷ See Abel, supra note 6, at 4.

⁶⁸ See Tutton et al., supra note 11, at 740-41.

⁶⁹ See id. at 739.

⁷⁰ See id. at 742.

bership.⁷¹ Therefore, using DNA tests to identify "true" nationals was misplaced.

The HPPP was also consistent with the growing criminalization of asylum seekers. Like many DNA testing regimes, it treated asylum seekers as suspects, suspended their basic human rights, and subjected them to a questionable form of experimentation⁷² which they could not refuse without bearing some consequences.⁷³

The government in Canada has similarly used tests to determine nationality. In 2018, there were several news reports alleging that the Canada Border Services Agency ("CBSA") had used direct-to-consumer genetic ancestry tests⁷⁴ to determine the nationality of detained migrants. According to one of these reports, authorities used a DNA test to determine whether a refugee was Liberian or Nigerian when the refugee had been granted permanent residency and then convicted of a deportable crime. 75 Despite proposals to establish a comprehensive framework for DNA testing in all immigration procedures,76 this particular usage of genetic testing is not subject to the CIC's limitations on the use of testing to prove kinship in family reunification.⁷⁷ Interestingly, in this case, DNA tests were used in the post-immigration stage on a person who was already a permanent resident, demonstrating that for the sake of DNA testing, being an immigrant is not just a temporary legal status that a person can shed through naturalization, but a primordial status of vulnerability. Such an approach runs the risk of encouraging and institutionalizing xenophobia.

DNA tests have also been used to determine the Jewishness of migrants in *Israel*. Israel's immigration law gives preference to Jewish migrants over all others. The State of Israel defines Jewishness broadly, including persons whose grandparents were Jewish. While this does not seem to be the official policy, some individuals from the Former Soviet Union ("FSU") have attested to being required to take a DNA test to prove that they are Jewish, in order to participate in a Birthright Israel trip. Others allege that they have

⁷¹ See id. at 747.

⁷² See id. at 739.

⁷³ See id. at 747–48. Such harsh consequences could include: having the refusal held against the refusing person as proof that the person is not credible; requiring the refusing person to endure additional time in detention while proving their country of origin in more time-consuming ways; or being threatened with deportation to a country that will deny the refusing person entry. See Abel, supra note 6, at 4.

⁷⁴ Direct-to-consumer genetic ancestry tests are tests that are available for purchase by individuals, who can test themselves and send in the DNA samples in order to receive results.

⁷⁵ See Abel, supra note 6, at 3.

⁷⁶ See Joly et al., supra note 44, at 401.

⁷⁷ See Gov't of Canada, supra note 43.

⁷⁸ See Tally Kritzman-Amir, "Otherness" as the Underlying Principle in Israel's Asylum Regime, 42 Isr. L. Rev. 306, 310–14 (2010).

⁷⁹ See The Law of Return, 5710–1950, SH 570 (Isr.), https://www.refworld.org/docid/3ae6b4ea1b.html, archived at https://perma.cc/A358-SS6N.

⁸⁰ See Ian V. McGonigle & Lauren W. Herman, Genetic citizenship: DNA testing and the Israeli Law of Return, 2 J. L. & BIOSCIENCES 469, 469 (2015); TOI Staff, Teen Told She Can't

had to take such tests to immigrate (make *Aliya*) to Israel and to receive the benefits that the state confers to Jewish migrants, though in this case too, such testing is not grounded in any official policy.⁸¹ Because the above-mentioned definition of "Jewish" in Israel's immigration law differs significantly from the religious definition of "Jewish," DNA tests are sometimes also required from immigrants, often from the FSU,⁸² to prove Jewishness after having migrated, and for example, before marrying another Jewish person in a Jewish religious ceremony, or before obtaining a birth or death certificate.⁸³

The reliance on DNA testing to determine who is Jewish in religious court was upheld by the Israeli High Court of Justice. The Court found that the DNA requirement was not discriminatory since the tests were voluntary and that people could have avoided the tests by foregoing their requests to the religious court. At In this case as well, the testing requirement derives from an atmosphere of suspicion, given that claiming to be Jewish in Israel could have dramatic implications for an individual's access to rights, benefits, and status. In each of these immigration contexts where DNA testing occurs in Israel, the tests search for a Jewish genetic marker, or evidence of inheritable diseases common in Jewish groups. Critics of DNA testing in Israel have drawn attention to the fact that the tests consider Judaism as a race, rather than as a religion or nationality, in a perversely somewhat similar way to that of Nazi Germany (though the motivations are obviously fundamentally different.)

Finally, the State of Israel has at times required that non-Jewish citizens wishing to enter Israel from Gaza to renew their Israeli documents and establish their identity take a DNA test. This requirement has been challenged

Join Birthright Without DNA Test, TIMES OF ISRAEL (July 28, 2013), https://www.timesofisrael.com/teen-told-she-cant-join-birthright-without-dna-test/, archived at https://perma.cc/52BC-N8ET. Birthright is a fully-funded visit to Israel with the purpose of connecting young adults with their Jewish heritage and encouraging them to immigrate to the country. See Birthright Israel Foundation, Our Mission, https://birthrightisrael.foundation/mission, archived at https://perma.cc/8QQ8-YYP9.

81 See McGonigle & Herman, supra note 80, at 469-70.

82 Migrants from the FSU are more susceptible to the suspicions that they may not be Jewish according to the religious definition, since many of them were only Jewish under the broader legal definition.

⁸³ See Editorial, DNA Testing to 'Prove' Jewishness Is Spine-chilling, HAARETZ ONLINE (Sept. 7, 2019), https://www.haaretz.com/opinion/editorial/dna-testing-to-prove-jewishness-is-spine-chilling-1.7772897, archived at https://perma.cc/Q7NZ-BBJP [hereinafter Haaretz Editorial]; Marissa Newman, Rabbinate DNA tests seek Jewishness in the blood, become a bone of contention, Times of Israel (Oct. 7, 2019), https://www.timesofisrael.com/rabbinate-dna-tests-seek-jewishness-in-the-blood-become-a-bone-of-contention/, archived at https://perma.cc/8WVM-EUA8.

⁸⁴ HCJ 2477/19 Liebermann v. The Chief Rabbi of Israel (2019) (Isr.), https://supreme decisions.court.gov.il/Home/Download?path=HebrewVerdicts\19\770\024\z04&fileName=19024770.Z04&type=4, *archived at* https://perma.cc/SB5V-KRFL.

⁸⁵ See Susan Martha Kahn, The Multiple Meanings of Jewish Genes, 29 Culture, Med. & Psychiatry 179, 182 (2005).

86 See McGonigle & Herman, supra note 80, at 474-75.

⁸⁷ See Haaretz Editorial, supra note 83.

in court multiple times, with inconsistent results. In some cases, the court has pressured the individuals to undergo DNA tests to verify their identity,⁸⁸ and in others it has pressured the State of Israel to withdraw this condition.⁸⁹

Scholars have criticized the reliance on DNA tests to establish identity, citizenship, or national affiliation in various countries as extremely problematic. The scholarship focuses on two types of tests: genetic ancestry and isotope testing, both of which lack accuracy and precision. 90 Isotope tests attempt to identify where a person has resided according to substances to which that person has been exposed, as observed in the nails and hair. They are able to detect substances to which a person was exposed over the last six months, during which the person might have been in transit countries or refugee camps, or in contact with international food donations, making these tests inaccurate at identifying the individuals' country of origin. In addition, information on biological markers of such substances in various developing countries is scarce, rendering this test ill-suited to begin with.⁹¹ Similarly, critics have deemed ancestry tests inadequate since "the idea that genetic variability follows man-made national boundaries is absurd."92 Another problem with ancestry tests is that some countries lack a reference population base. For example, some genetic ancestry tests do not include all countries in their pool of possible results, whereas other tests merely refer to regions of the world, making it impossible to accurately deduce an individual's nationality.93

C. Surveillance, Monitoring, and "Crime Prevention"

A third purpose of DNA collection is to increase the surveillance and monitoring of immigrants.

In early October 2019, DHS announced that it was developing regulations authorizing the collection of DNA samples from migrants in immigration detention facilities, with the stated purpose of preventing crime. ⁹⁴ The proposed regulations were pursuant to the requirements of the DNA Fingerprint Act of 2005. On January 6, 2020, DNA collection in immigration de-

⁸⁸ HCJ 1750/18 Assi v. The Ministry of Interior (2019) (Isr.), https://supremedecisions.court.gov.il/Home/Download?path=HebrewVerdicts\18\500\017\a10&fileName=18017500. A10&type=2, archived at https://perma.cc/KKW9-FNHC (documents submitted in this petition are on file with the author).

⁸⁹ See AP 63291-12-12 Wahidi v. The Minister of Interior (2013) (Isr.), https://www.gisha.org/UserFiles/File/LegalDocuments/63291-12-12/63291-12-12-verdict.pdf, archived at https://perma.cc/J8UE-JK4J.

⁹⁰ See Tutton et al., supra note 11, at 743–46.

⁹¹ See id. at 746-47.

⁹² See id. at 747 (quoting Editorial, Genetics without borders, NATURE (Oct. 8, 2009), https://www.nature.com/articles/461697a, archived at https://perma.cc/EJ7Y-ZG2S).

⁹³ See Abel, supra note 6, at 4.

⁹⁴ DNA Sample Collection Regulations, *supra* note 3; Dickerson, *supra* note 3.

tention officially started.⁹⁵ All migrants within a certain age group are required to provide a sample.⁹⁶ The DNA samples are added to the Combined DNA Index System ("CODIS"), where the DNA of individuals with felony convictions and accused individuals⁹⁷ is stored and exchanged between different state and federal agencies.

While DNA testing in the context of immigration control in the United States is not new,⁹⁸ including the samples in the CODIS is. This development marks the first time that the DNA of persons not suspected of any criminal involvement has been added to the database.⁹⁹ Critics of this policy argue against it on a number of grounds: that it violates the migrants' privacy;¹⁰⁰ that it criminalizes migrants, both by exposing them to a greater risk of being approached by law enforcement agencies and by combining their genetic information with that of convicted individuals;¹⁰¹ that it fails to distinguish between the different categories of migrants, such as asylum seekers and unaccompanied minors;¹⁰² and that it could have negative implications for the family members of those tested, by enabling the population of mi-

⁹⁵ See Daniel I. Morales et al., DNA Collection at the Border Threatens the Privacy of All Americans, N.Y. Times (Jan. 23, 2020), https://www.nytimes.com/2020/01/23/opinion/dnacollection-border-privacy.html?action=click&module=opinion&pgtype=homepage, archived at https://perma.cc/VM3H-4CB3.

⁹⁶ "The United States Border Patrol collects DNA from any individual over the age of 14, while the CBP Office of Field Operations collects DNA from individuals who are between the ages of 14 and 79 years old. Currently, CBP does not categorically fingerprint individuals under the age of 14 but has the discretion to do so in potentially criminal situations." U.S. DEP'T OF HOMELAND SEC., DHS/ALL/PIA-080, PRIVACY IMPACT ASSESSMENT FOR CBP AND ICE DNA COLLECTION 4 n.14 (July 23, 2020), https://www.dhs.gov/sites/default/files/publications/privacy-pia-dhs080-detaineedna-october2020.pdf, *archived at* https://perma.cc/9MAZ-6K9E.

⁹⁷ Maryland v. King, 569 U.S. 435, 464 (2013) (holding that the collection and storage in CODIS of DNA samples of individuals that have been arrested but not yet convicted is reasonable under the Fourth Amendment).

⁹⁸ See Lynch, supra note 8, at 7.

⁹⁹ See Morales et al., supra note 95.

¹⁰⁰ See Nicole Austin-Hillery, US Proposal to Collect DNA from Detained Immigrants Violates Privacy Rights, Hum. Rts. Watch (Nov. 12, 2019), https://www.hrw.org/news/2019/11/12/us-proposal-collect-dna-detained-immigrants-violates-privacy-rights, archived at https://perma.cc/C3FK-E65U; Vera Eidelman, Privacy at risk: Trump Plan to Collect DNA from Detained Immigrants Should Alarm Us All, USA Today (Nov. 7, 2019), https://www.usatoday.com/story/opinion/2019/11/07/trump-dna-collection-detained-immigrants-privacy-rights-column/2510652001/, archived at https://perma.cc/AS9Y-KUSG.

¹⁰¹ See Lindzi Wessel, Scientists concerned over US plans to collect DNA data from immigrants, NATURE (Oct. 7, 2019), https://www.nature.com/articles/d41586-019-02998-3, archived at https://perma.cc/5LG6-H754; Nermeen Arastu et al., Why Forced DNA Collection of Migrants Should Concern Us All, N.Y. DAILY NEWS (Nov. 13, 2019), https://www.nydailynews.com/opinion/ny-oped-why-forced-dna-collection-of-migrants-should-concern-us-all-20191113-od4sl6462bapbamhjltthuo7qa-story.html, archived at https://perma.cc/K8PJ-XTJJ.

¹⁰² See Nicole Narea, The US is expanding its collection of DNA from immigrant detainees for a federal criminal database, Vox (Mar. 6, 2020), https://www.vox.com/policy-and-politics/2019/10/3/20895459/dna-test-immigrant-detention-criminal-database, archived at https://perma.cc/8U9P-ERVK; Morales et al., supra note 95.

grants to be surveilled in a way that other populations cannot be. ¹⁰³ Critics also argue that this policy is charged with racial and gender bias and that the high cost is not justified given that accurate results cannot be guaranteed. ¹⁰⁴ Finally, this policy has been criticized as a disproportionate violation of the international human right to privacy, as lacking a legitimate purpose or a statutory basis, ¹⁰⁵ and as a violation of the Fourth Amendment rights of immigrants. ¹⁰⁶

This policy essentially marks the "function creep" of DNA testing in the United States. If originally tests were optional, though quite necessary for migrants who wanted to add evidence to their application for family reunification, they were later forced on migrants: first on specific migrants, for the purpose of determining their identity or nationality, and then later onto entire migrant populations. This "function creep" introduces a set of new vulnerabilities into the lives of migrants, including the risks of surveillance and criminalization, though it has, at least allegedly, the potential benefit of making the immigration process more efficient and speedier for some. 108

While DNA tests in the context of immigration range in purpose, ease of application, and voluntariness, they represent a common overarching purpose: to inform exclusionary decisions and surveil undesired migrants through collecting information about their bodies. Thus, these tests enhance already-existing exclusionary mechanisms which seek to keep migrants on the margins of society or out of the territory altogether.

II. DNA TESTING AND PRIVATIZATION: SOVEREIGNTY CHALLENGED BY GENETIC LABS

DNA tests conducted in the context of immigration typically result in the privatization of immigration control. Testing immigrants' DNA is often—though not always¹⁰⁹—conducted through private labs to which the immigration authorities of different countries delegate parts of their decisionmaking processes. In some cases, governments contract with a specific

¹⁰³ See Dickerson, supra note 3; No Forced DNA Collection, ACLU (2020), https://action.aclu.org/petition/no-forced-dna-collection, archived at https://perma.cc/78WT-SZUY.

¹⁰⁴ Eidelman, *supra* note 100.

¹⁰⁵ International Covenant on Civil and Political Rights art. 17, Dec. 16, 1966, 999 U.N.T.S. 171 (entered into force Mar. 23, 1976, ratified by the U.S. on June 8, 1992) [hereinafter ICCPR].

¹⁰⁶ Austin-Hillery, supra note 100.

¹⁰⁷ Lindskov Jacobsen, *supra* note 8, at 156.

 $^{^{108}}$ Id.

¹⁰⁹ For example, the collection and processing of the DNA tests of immigrants in immigration detention is conducted by the government agency directly and is not outsourced to a private lab. *See* U.S. Dep't of Homeland Sec., *supra* note 96, at 1.

lab or labs. ¹¹⁰ In other cases, governments use available market products, such as direct-to-consumer tests. ¹¹¹ And in yet other cases, governments provide a list of possible labs that they have deemed to be reliable, through which DNA tests may be conducted. ¹¹² In each of these models, private companies run tests on behalf of governments, and the results ultimately determine migrants' rights—and sometimes, the right of migrants to have rights at all. ¹¹³

Relying on experts who are not a part of the state decisionmaking apparatus of exclusion or inclusion is not in itself unique. States rely on language experts and country experts, as well as medical and mental health experts. What is unique about states' deference to DNA experts is that it often leads to a much more deleterious impact: DNA experts' findings often make or break a case, much more so than the input of other experts. Different countries give different weight to DNA test results. For example, while Finland sees a DNA test result as "a piece of evidence that is used to verify, confirm or complement other types of evidence," in Germany and Austria, the test is given a very high level of credibility and can determine the outcome of an application on its own. This means that some countries rely on the results of DNA tests administered and run by private companies in lieu of exercising the otherwise complex process of consideration in immigration cases.

This massive reliance on private genetic labs for making immigration-related decisions occurs alongside other processes of privatization of immigration regimes. Governments have outsourced aspects of admission processes, status determination, detention, the criminal adjudication of undocumented stay or entry cases, social integration mechanisms, and the provision of social and economic services. 116 Such privatization is striking given that "border control, admission of immigrants, social integration and distribution of benefits and membership to persons are all thought of in international legal doctrine as acts of state sovereignty. It is often perceived to be a state's privilege—as well as a state's duty and responsibility—to make deci-

¹¹⁰ For example, in the U.S., ICE contracted with Bode Cellmark Forensics, Inc. to conduct DNA tests at the southern border. The contract was a fixed price contract for 5.2 million dollars. U.S. Immigr. & Customs Enf't, *supra* note 6.

¹¹¹ For example, Canada used available consumer DNA testing products. Abel, *supra* note 6, at 5

¹¹² Torsten Heinemann & Thomas Lemke, *Germany: The Geneticization of the Family, in* Suspect Families: DNA Analysis, Family Reunification and Immigration Policies (Torsten Heinemann et al. eds., 2015); Hall & Naue, *supra* note 49, at 64–65.

¹¹³ On the process by which stateless persons lose their rights, *see generally* Hannah Arendt, Origins of Totalitarianism 293–96 (1973).

Adjudicating Refugee and Asylum Status: The Role of Witness, Expertise,
 And Testimony 54–84, 166–202, 222–44 (Benjamin N. Lawrance & Galya Ruffer eds., 2015).
 Moreno et al., *supra* note 23, at 279.

¹¹⁶ See Kritzman-Amir, supra note 7, at 202–11. Bloom, supra note 7, at 893, differentiates between migration facilitation by private entities, such as recruiters, agents and smugglers, which is heavily regulated, and the migration control by private entities, which is expanding but yet under-regulated.

sions on inclusion and exclusion in their various forms."¹¹⁷ The privatization of immigration regimes is especially concerning when we take into account the bigger picture of privatization of core elements of sovereignty, which includes, in addition to immigration, the privatization of security and prisons. This privatization shares an accompanying rhetoric of fear, a confluence of powerful interests, and a discourse of "other-ization."¹¹⁸ This parallel perhaps suggests that the state-centric focus regarding those above-mentioned elements is outdated, as states increasingly transfer authority to private power in these realms.¹¹⁹

When citizens imagine the immigration authorities of their countries making decisions on inclusion and exclusion, they imagine them as engaged in "limited discretionary gatekeeping." The bureaucrats of the migration regime are supposed to make professional, nuanced, complex, and thoughtful legally and factually informed decisions in an efficient and timely manner. In reality, of course, this is not always the case, but it is the ideal. Decisionmakers are supposed to take into account their knowledge of the domestic immigration laws and international human rights obligations, as well as information about national interests and risks and the situation and needs of the migrants. The bureaucracy of immigration regimes sustains the illusion that these regimes exercise sovereignty. Despite critiques that the discretion of immigration bureaucrats is, in fact, quite limited, 120 or, alternatively, that it varies from one bureaucrat to another¹²¹ and is sometimes influenced by biases, 122 we still imagine border regimes to include such discretion. The fact that some of the literature suggests that DNA tests can be beneficial to migrants since they free them from being at the mercy of the subjective immigration officer¹²³ is just another piece of evidence pointing to how immigration processes have become exclusionary, arbitrary, and capricious, and how far they have drifted from the above-mentioned ideal.

Additionally, it might be naïve to consider reliance on private genetic labs as "safer" and thus preferable for immigrants, given the labs' low levels of accountability as private rather than state actors. As private entities, they

¹¹⁷ Kritzman-Amir, supra note 7, at 198.

¹¹⁸ Bloom, supra note 7, at 896.

¹¹⁹ Georg Menz, Neo-Liberalism, Privatization and the Outsourcing of Migration Management: A Five-Country Comparison, 15 Competition & Change 116, 116 (2011).

¹²⁰ See, e.g., Vic Satzewich, Visa Officers as Gatekeeper of a State's Borders: The Social Determinants of Discretion in Spousal Sponsorship Cases in Canada, 40 J. ETHNIC & MIGRATION STUD. 1450, 1451 (2014) (suggesting that discretion is "tightly bound insofar as applicants are using state prescribed rules and procedures to legally cross a border").

¹²¹ See, e.g., Andrew I. Schoenholtz et al., Refugee Roulette: Disparities in Asylum Adjudication, 60 Stan. L. Rev. 295, 302 (2007).

¹²² See generally Rachel Hall, When is a Wife Not a Wife? Some Observations on the Immigration Experiences of South Asian Women in West Yorkshire, 8 CONTEMP. POL. 55 (2002) (examining how the racialized stereotypical image of the passive South Asian woman has informed the categorizing of this group of minority ethnic women within the system of British immigration control).

¹²³ Janice D. Villiers, Brave New World: The Use and Potential Misuse of DNA Technology in Immigration Law, 30 B.C. THIRD WORLD L. J. 239, 250 (2010).

are not directly responsible for human rights violations in the same way that states are. Relying on DNA tests means that migrants will first depend on the discretion of immigration officers to determine whether DNA tests are required, and then will rely on the private company that runs these tests and delivers its findings.¹²⁴ The labs that run the DNA tests become "the primary repository of expertise and knowledge which once laid with States, making them crucial players in policy development as well as enactment."¹²⁵

When immigration regimes privatize parts of their decisionmaking process, they are engaged in "referral or by-proxy gatekeeping." Instead of exercising independent discretion, these regimes come to delegate core elements of their decisionmaking process to private entities, relying on their findings and rubberstamping them as governmental decisions. 126 As I have written, "[d]espite the centrality of sovereign power in managing migration, . . . it is clear that we are witnessing a gradual process in which states dilute their own exercise of sovereign power toward immigrants and transfer more authority to private and other non-state actors."127 It is a process of privatization in the sense that there is a temporary or permanent transfer to the private sector of a function which was previously exercised by a public agency. 128 In the past I have argued that such privatization does not represent states' loss of control over immigration, but rather is a strategy that states use to adapt and regain control over immigration.¹²⁹ This also seems to be the case with DNA tests. Struggling to ascertain family ties, identify countries of origin, and surveil migrants, states adapt and regain control (or the illusion of control) over immigration by outsourcing migrant identification and surveillance to private non-state entities. Thus, private entities are engaged in, as Bloom puts it, the creation of non-citizens: providing supporting evidence on the basis of which exclusionary decisions are made. 130 Privatization functions as a buffer¹³¹ which allows governments to distance themselves from human rights violations and to shirk their responsibilities to migrants. 132 Though plenty of bias lies beneath DNA tests' veneer of respectability, ¹³³

¹²⁴ On the fact that suggesting a DNA test is dependent on the discretion of the immigration officer, *see* Barata et al., *supra* note 24, at 602.

¹²⁵ Bloom, supra note 7, at 900.

¹²⁶ See supra note 115 and accompanying text (regarding the varying degree of reliance on DNA tests in different countries).

¹²⁷ Kritzman-Amir, supra note 7, at 199; see also Robert Koulish, Blackwater and the Privatization of Immigration Control, 20 St. Thomas L. Rev. 462, 463 (2008); Huyen Pham, The Private Enforcement of Immigration Laws, 96 Geo. L.J. 777, 785 (2008); Stephen Lee, Private Immigration Screening in Workplace, 61 Stan. L. Rev. 1103, 1103 (2009); Jennifer M. Chacón, Privatized Immigration Enforcement, 52 Harv. C.R.-C.L. L. Rev. 1, 3 (2017).

¹²⁸ Pierre Guislain, The Privatization Challenge: A Strategic, Legal, and Institutional Analysis of International Experience 10 (1997).

¹²⁹ See Kritzman-Amir, supra note 7, at 201.

¹³⁰ See Bloom, supra note 7, at 893.

¹³¹ See id. at 892.

¹³² See Kritzman-Amir, supra note 7, at 199–200; see also Menz, supra note 119, at 119 (referring to this as "blame avoidance").

¹³³ See infra Part IV.

these tests provide governments with a means to claim a scientific, un-biased justification for decisions to exclude. While in some cases private DNA companies replace functions of the state's immigration regime, in other cases they go beyond these functions, exerting additional forms of control on top of those already in place.¹³⁴ This is true of the new policy to collect DNA from detained migrants in the U.S., which adds another layer of surveillance to those which already exist.¹³⁵

The literature on the privatization of immigration enforcement identifies some core issues that may also apply in the context of DNA testing. First, such practices tend to self-perpetuate due to the various incentives on all sides. Indeed, many cases of privatization started as pilot DNA test programs, but were later extended. 136 Second, private entities tend to successfully influence regulatory efforts. 137 Such is the case with the privatization of immigration detention. 138 Some of the scholarship also suggests that private labs are using their medical expertise to forge new alliances with political decision-makers, to receive funding and to influence decisionmaking. 139 They have incentives to contribute to exclusionary efforts, for example, by detecting so-called "fraud" in family reunification applications, or by attributing a country of nationality to a person that is "convenient" for the government hiring the lab's services, to make exclusion possible. They might be inclined to "err on the side of caution" and to suggest exclusion when in doubt. 140 Indeed, so far incidents in which labs have taken an active stance in support of inclusion are rare.¹⁴¹ Both governments and the private labs have incentives to attribute high levels of accuracy to the tests. For example, the rapid DNA tests conducted at the southern border were reported by ICE and DHS as achieving a 99.5% accuracy rate, while advocacy groups argued that the accuracy rate was only 77%. 142 Both labs and governments also lack incentives to disclose lab errors, lab corruption, or misinterpreted lab results.143

¹³⁴ See Menz, supra note 119, at 117.

¹³⁵ DNA Sample Collection Regulations, supra note 3.

¹³⁶ Such is the case in the United States, Austria, and Finland, for example. The United Kingdom's decision to discontinue the HPPP stands out as an example of a pilot that has not led to an establishment of a long-term DNA testing program.

¹³⁷ Menz, *supra* note 119, at 118.

¹³⁸ See Chacón, supra note 127, at 18-43.

¹³⁹ See Heinemann et al., supra note 47, at 7.

¹⁴⁰ See Bloom, supra note 7, at 902.

¹⁴¹ See Heinemann & Lemke, supra note 46, at 499–500 (describing a case in which a lab in Germany discovered that a child was not genetically related to either of his parents but was nevertheless so convinced that they were a true family that the staff wrote letters to the immigration authorities advocating that they nevertheless grant family reunification).

¹⁴² Chris Burt, *Rapid DNA Testing at US Border Extended and Criticized*, BIOMETRIC UPDATE.COM (Aug. 7, 2019), https://www.biometricupdate.com/201908/rapid-dna-testing-at-u-sborder-extended-and-criticized, *archived at* https://perma.cc/H4S2-JJ64.

¹⁴³ Emily Holland, Moving the Virtual Border to the Cellular Level: Mandatory DNA Testing and the U.S. Refugee Family Reunification Program, 99 CALIF. L. REV. 1635, 1664–67 (2011).

By obtaining a significant financial gain from genetically testing immigrants, while at the same time having few obligations to the individuals tested, laboratories effectively commodify migrants. Given that laboratories play such a substantial role in the decisionmaking processes that influence migrants' core rights, "[n]oncitizens come to be seen principally as part of an economic infrastructure, to be used for bargaining, as means to achieving certain ends. As a result, their humanity, and the attendant rights and needs, come second if at all."¹⁴⁴

The process of privatizing elements of the immigration regime also creates a market for those elements, as DNA labs seek business from their migrant clients. This marketization is partial at best, because, unlike in a true free market situation, migrants are largely unable to take their business elsewhere and are limited by the range of options presented.¹⁴⁵ DNA tests are very expensive and are therefore out of reach for some. They add additional costs to an already-costly process of immigration. The increased financial burden has required some migrants to save for months before taking 146 the tests and forced others to borrow money from friends and relatives. Sometimes the cost is altogether prohibitive. 147 Prices may vary according to the location of the test, the pricing of the different labs, and the number of family members to be tested. 148 Since the private companies are processing tests for immigrants alongside other tests at a speed determined by market forces, processing delays can occur, which can jeopardize a migrant's immigration case. 149 Therefore it cannot be assumed that those who do not undergo testing have something to hide—many individuals likely do not take the test because they are unable to afford the delays or the costs. 150 Such a cost is in addition to the already pre-existing inequality in access to mobility in the world. 151 Only a few countries offer funding for the tests, mitigating the marketization effect, 152 but most leave the price levels and processing speed unregulated.

From the countries' point of view, in the process of relying on private labs, two mutually-exclusive constituencies are created: the national "us," on behalf of whom the labs operate, and the non-citizens, who are treated as suspect, dishonest, and requiring control. ¹⁵³ In some cases, the labs that migrants use deny that they work with governments' border agencies, and claim that their aim is to protect the privacy of the users, which, in this case, are

¹⁴⁴ Bloom, supra note 7, at 900.

¹⁴⁵ See id. at 897-98.

¹⁴⁶ See Barata et al., supra note 24, at 615-16.

¹⁴⁷ See Holland, supra note 143, at 1667–69.

¹⁴⁸ See Barata et al., supra note 24, at 615.

¹⁴⁹ See id.

¹⁵⁰ Taitz et al., supra note 49, at 28.

¹⁵¹ Spijkerboer, *supra* note 17, at 456–61.

¹⁵² See Moreno et al., supra note 23, at 262-63.

¹⁵³ See Bloom, supra note 7, at 898.

those who are external to the national "us."¹⁵⁴ Yet at the same time, the labs offer no privacy protections to migrants, and they often provide the results to the governments and not to the individuals whom they test. ¹⁵⁵ Even when companies provide test results directly to consumers, they do so in response to requirements imposed by a governmental agency, and the test result will ultimately be submitted to the government, so they cannot really claim to be working solely for the tested individuals. ¹⁵⁶

Relying on DNA tests to make decisions related to immigration control means, by definition, a deepening of the dependence of countries on the "business of noncitizenship," 157 in which private entities, labs in this case, are central. While private companies could do their work and respect the human rights of migrants, there are structural, market-based incentives not to uphold those rights, due to the lack of regulation, the lack of accountability under international human rights law, and their for-profit nature. In critiquing privatization, as immigration law professor Jennifer Chacón notes, it is important not to obscure the question of the desirability of the innovation itself, by focusing on its privatized nature.¹⁵⁸ But challenging the privatization of DNA testing may provide an indirect avenue for limiting government attempts to use DNA tests to exclude. The fact that DNA samples are held by private companies which have a say in immigration decisions has direct implications for the exercise of sovereign discretion. As Chacón noted, studying the issue as a form of privatization is potentially useful in establishing an effective means of advocacy without having to address the issue of immigration control itself.¹⁵⁹ It may very well be that attacking the privatization aspect of DNA testing is a more fruitful avenue for strategic litigation than arguing against the practice of DNA collection itself.

III. BIOPOWER AND MIGRANTS' DNA

DNA tests are also attempts to govern migrants through their bodies. 160 This is a modern and overtly oppressive application of sovereign power. It is elusive because it does not resemble classical forms of governance. Nevertheless, it is important to understand and conceptualize. One such helpful conceptualization was led by Michel Foucault.

¹⁵⁴ Abel, *supra* note 6, at 5 (citing Tamara Khandaker, *Canada is Using Ancestry DNA Websites to Help It Deport People*, VICE (July 26, 2018), https://www.vice.com/en_ca/article/n7wqg7/la-times-staffers-demand-internal-investigation-claim-retaliatory-environment, *archived at* https://perma.cc/8LV5-SP5Z).

¹⁵⁵ *Id.* at 4 (citing Khandaker, *supra* note 154).

¹⁵⁶ *Id.* at 5.

¹⁵⁷ Bloom, supra note 7, at 903.

¹⁵⁸ Chacón, supra note 127, at 44.

¹⁵⁹ Id.

¹⁶⁰ For a historical perspective on these attempts, *see generally* June Dwyer, *Disease, Deformity, and Defiance: Writing the Language of Immigration Law and the Eugenics Movement on the Immigrant Body*, 28 MeLus 105, 105 (2003).

In Foucauldian terms, the use of DNA tests on immigrants is an exercise of biopower. The term is touted in his historical account, according to which, for many years, the perception of sovereign power was based on the right of the sovereign "to *take* life or *let* live" (italics in original) which included the power to execute dissenters and those who posed a threat to the state and its residents. However, since the 17th century, sovereigns have been entitled to "foster life or disallow it to the point of death" (italics in original), and can now control sex, physical ability, race, life, and all bodily aspects. The key purpose of the mechanism of power is "to incite, reinforce, control, monitor, optimize, and organize the forces under it." Foucault describes this power as biopower. Politics intervenes with the human body in an effort to inject politics into bare life and biology. Biopolitics defines itself around the demographic discourse and deals with separating populations along political, economic, racial, sexual, and ideological lines.

Foucault sets forth a two-part analysis of biopower. The first part examines biopower as a regulatory mechanism of an overall population (bio-politics of the population), which refers to governmental techniques applied to manage and control the life of a population and consequently to influence and govern the 'social body.' 166 Anti-migration policies, procedures, and actions that target undocumented migrants, asylum seekers, and refugees are designed to control and exclude unwelcome migrants and to eliminate an influx of newcomers. Arguably, states deploy mechanisms of power within admission procedures to control and regulate movements and presence, to separate incoming migration flows from the native population, and to create a typology to distinguish migrants from each other.

The second part of Foucault's analysis is the 'anatamo-politics of the human body.' ¹⁶⁷ It refers to technologies of dispersed power that operate on the micro level and subject the individual and his body to control. ¹⁶⁸ Typically, those mechanisms are applied by constructing perceptual networks and physical routines, for example in disciplinary institutions such as hospitals, schools, militaries, prisons, and detention facilities. ¹⁶⁹ The disciplinary power takes control over the individual, oppresses him, and treats his body as a machine, as described by Foucault: "[this is] the point where power reaches into the very grain of individuals, touches their bodies and inserts itself into their actions and attitudes, their discourse, learning processes and

¹⁶¹ FOUCAULT, supra note 13, at 136.

¹⁶² Id. at 137–38.

¹⁶³ Id. at 136-38.

¹⁶⁴ *Id.* at 136.

¹⁶⁵ *Id.* at 140.

¹a. at 140.

¹⁶⁶ Id. at 136.

¹⁶⁷ Id. at 139.

¹⁶⁸ *Id*.

¹⁶⁹ *Id*.

everyday lives."¹⁷⁰ Hence, the disciplinary power assures political subjection.¹⁷¹ DNA tests of migrants, on this reading, is a sub-cellular level of control and politicization.

The mere projection of migration as a problem of demography is coupled with a survival of a biological kind of discourse around "the nation," "the political unit" or "we the people" (a "we" that consists of people who do not necessarily share common heritage or characteristics, but instead share a subordination to a social contract.) The movement and presence of persons, a phenomenon stripped of its human face, is posed as a surprising threat, and exclusion as an existential must. The political transforms into bio-political, dealing mainly with one question: what would be the most efficiently organized way to ensure that bare life is categorized, controlled, and utilized? DNA tests join other forms of bio-power that migrants encounter in their immigration process. Migrant bodies are controlled in various forms: when insufficient food is given in reception centers, when they are abandoned behind closed borders or left to drown in the sea, when detention is used in the different stages of their migration, when removals are blind to personal circumstances, when contraceptives are given to refugees or, conversely, abortions are prohibited in immigration detention, when they are expected to provide physical evidence of their age¹⁷² or the torture they were subjected to, 173 and when biometric information is collected. 174 These last ones include the collection of fingerprints, iris scans, and facial recognition technologies, collected by governments or by international organizations. 175

DNA tests are an arm of this power. It is the power to manage the population of non-nationals and potentially exclude it, by drawing conclusions from technological examinations of their bodies. The result has been termed by Katja Lindskov Jacobsen as the creation of the digital refugee, or a digital migrant "whose safety has become inseparable from a now digitalized body part (e.g. iris pattern [or DNA]) that has been made 'machine readable.'"¹⁷⁶ There is growing reliance on biometric machines in order to make decisions about the migrant or refugee.¹⁷⁷

¹⁷⁰ MICHEL FOUCAULT, POWER/KNOWLEDGE: SELECTED INTERVIEWS AND OTHER WRITINGS 1972-1977 39 (Colin Gordon ed., Colin Gordon et al. trans., Pantheon Books 1980).

 $^{^{171}}$ Thomas Lemke, Biopolitics: An Advanced Introduction 36 (Monica J. Casper & Lisa Jean Moore eds., Eric Frederick Trump trans., 2011).

¹⁷² Holland, *supra* note 143, at 1658–59.

¹⁷³ *Id.* at 1659–60.

¹⁷⁴ Nermeen Arastu et al., *Why Forced DNA Collection of Migrants Should Concern Us All*, N.Y. DAILY NEWS (Nov. 13, 2019), https://www.nydailynews.com/opinion/ny-oped-why-forced-dna-collection-of-migrants-should-concern-us-all-20191113-od4sl6462bapbamhjltthuo 7qa-story.html, *archived at* https://perma.cc/U6LT-3V43.

¹⁷⁵ See U.N. High Comm²r for Refugees, Biometric Identity Management System: Enhancing Registration and Data Management, https://www.unhcr.org/protection/basic/550c304c9/biometric-identity-management-system.html, archived at https://perma.cc/ZU65-826R

¹⁷⁶ Lindskov Jacobsen, *supra* note 8, at 148.

¹⁷⁷ See id. at 153-54.

Any collection of migrants' biometric information triggers concerns over privacy, ¹⁷⁸ the susceptibility of individuals to racial biases, and risks that information will be transferred, in accordance with international datasharing agreements or otherwise, to the governments whose persecution the migrants are fleeing. ¹⁷⁹ Unlike other forms of biometric information, information collected in DNA tests is much more comprehensive, and thus a particularly powerful subjection to biopower. Also, obtaining biometric information is much more invasive, and thus it is much more "biological," raising stronger privacy concerns. These concerns are amplified by the fact that the tests are facilitated through private companies. The use of private companies is a realization of Foucault's dark account, according to which, "biopower refers to the conjunction of strategies adopted by the state and a diverse range of institutions and agencies to constitute and govern the population, made possible by forms of specialized knowledge and self-governing participants." ¹⁸⁰

Countries have adopted various protective mechanisms to alleviate these privacy concerns. Those protections might partially mitigate the breach of the right to privacy, but in most cases they are insufficient to completely resolve the problem.¹⁸¹ While some countries store DNA collected from immigrants,¹⁸² others do not.¹⁸³ Some do not store DNA together with any identifying information, disaggregating it from other data on the characteristic identifiers and circumstances of the migrant.¹⁸⁴ Some countries provide written statements about how the DNA will be stored and used, and for what purposes.¹⁸⁵ Some countries require migrants to sign consent forms, but, as mentioned above, consent is quite a fragile concept in this context. The difficulty of obtaining consent for tests conducted on children is particularly problematic.¹⁸⁶ For example, in cases of family reunification, when the tests

 $^{^{178}}$ See U.N. High Comm'r for Refugees, UNHCR Guidelines on the Sharing of Information on Individual Cases, II. General Principles a) Right to Privacy of the Individual, \P 9–10 (on file with author).

¹⁷⁹ Lynch, *supra* note 8, at 10-12.

¹⁸⁰ Sujata Raman & Richard Tutton, *Life, Science, and Biopower*, 35 Sci., Tech. & Hum. Values 711, 715 (2010).

¹⁸¹ U.S. Dep't of Homeland Sec., DHS/ICE/PIA-050, Privacy Impact Assessment for the Rapid DNA Operational Use 6–14 (June 25, 2019), https://www.dhs.gov/sites/default/files/publications/privacy-pia-ice-rapiddna-june2019_0.pdf, archived at https://perma.cc/GTR4-2VG2. Israel, however, stands out with the requirement that DNA tests cannot be carried out unless approved by a court. See § 11, Genetic Information Law, 5761–2000, SH 1766, 62, 65 (Isr.), https://www.nevo.co.il/Law_word/law14/law-1766.pdf, archived at https://perma.cc/KM2X-BASF.

¹⁸² For example, Germany allows the storage of information after the family's case is determined. *See* Martin G. Weiss, Ethical Aspects of DNA Testing for Family Reunification, *in* Suspect Families: DNA Analysis, Family Reunification and Immigration Policies 78, 85 (Torsten Heinemann et al. eds., 2015).

¹⁸³ *Id.* (mentioning that Finland does not store this information).

¹⁸⁴ U.S. DEP'T OF HOMELAND SEC., supra note 181, at 3-4, 6.

¹⁸⁵ Id at 1-6

¹⁸⁶ Weiss, *supra* note 182, at 83–84.

are performed to refute a suspicion that the persons accompanying a child are not his family members, governments essentially assume that the very people they suspect of lying about their guardianship of the child are in a position to provide consent on the child's behalf. There is an inherent contradiction in the consent requirement: if a person can give consent on behalf of a child, then that person is the child's guardian, and as such, should not be subjected to suspicions; if the person is not the guardian, he cannot consent to the test that would provide DNA evidence to that effect.

These privacy concerns exist, even though states are legally obligated to protect the privacy of migrants and refugees by various international legal instruments. These include general international human rights law instruments, which apply to immigrants in receiving countries¹⁸⁷ and include privacy protections. ¹⁸⁸ In addition, the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families, ¹⁸⁹ which applies to some migrant workers in some countries, also protects the migrant worker's right to privacy. ¹⁹⁰ Some countries include constitutional protections ¹⁹¹ or statutory protections. ¹⁹² Yet protection of the right to privacy of migrants is often far inferior to that of nationals. ¹⁹³ Though proportional infringements on the right to privacy may be permitted, in certain circumstances, ¹⁹⁴ the extent and nature of the infringement described above cannot be seen as proportionate. ¹⁹⁵

Among the migrants most susceptible to biopower are those engaged in family migration and refugees. I will discuss the vulnerability of family migration below, ¹⁹⁶ but for now I will focus on refugees. The movement of refugees fleeing their countries of origin to escape persecution across borders is often undocumented and unauthorized. They thus pose a particular

¹⁸⁷ Tally Kritzman-Amir & Kayla Rothman-Zecher, *Mainstreaming Refugee Women's Rights Advocacy*, 42 HARV. J. L. & GENDER 371, 389–92 (2019).

¹⁸⁸ ICCPR, *supra* note 105, art. 17.

¹⁸⁹ G.A. Res. 45/158, International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families (Dec. 18, 1990), https://www.refworld.org/docid/3ae6b3980.html, *archived at* https://perma.cc/FW6D-ZFXH [hereinafter ICRMW].

¹⁹⁰ However, most countries receiving migrants have not ratified the convention.

¹⁹¹ See, e.g., Basic Law: Human Dignity and Liberty, 5752-1992, SH 1391 150 (Isr.), https://www.refworld.org/docid/3ae6b52618.html, archived at https://perma.cc/YY8M-P6TS; Raquel Aldana, Of Katz and "Aliens": Privacy Expectations and the Immigration Raids, 41 U.C. DAVIS L. REV. 1081, 1090 (2008).

¹⁹² 5 U.S.C. § 522a.

¹⁹³ Heinemann & Lemke, *supra* note 46, at 501–02.

¹⁹⁴ U.N. High Comm'r for Refugees, UNHCR Note on DNA Testing to Establish Family Relationships in the Refugee Context (June 2008), https://www.refworld.org/docid/48620c2d2.html, *archived at* https://perma.cc/8QWH-JWU6 [hereinafter UNHCR Note on DNA Testing].

¹⁹⁵ Gali Katznelson, *Compulsory Genetic Testing for Refugees: No Thanks*, Bill of Health (June 22, 2018), https://blog.petrieflom.law.harvard.edu/2018/06/22/compulsory-genetic-testing-for-refugees-no-thanks/, *archived at* https://perma.cc/3C4A-SVYP.

¹⁹⁶ See infra Part V.

challenge to sovereignty and are perceived as needing to be disciplined and managed more than others.

Despite the fact that international human rights law grants refugees more protections than other types of migrants, and limits states' sovereign discretion, in the DNA testing context, the nature of their migration makes them less protected and more exposed. Since refugees often do not carry adequate documentation,¹⁹⁷ they are likely to be required to submit to DNA testing, as their body is the most accessible—and sometimes the only available—source of information. Moreover, in the era of compassion fatigue,¹⁹⁸ refugees are perceived as suspect persons who have incentives to make fraudulent claims, rather than as persons trying to receive protection for their human rights.¹⁹⁹ In this atmosphere, even those who do present documents are sometimes doubted and required to take a DNA test.²⁰⁰ Indeed, for some refugees, DNA testing is mandatory.²⁰¹ Ironically, some refugees escape the surveillance they endured in their country of origin only to be subjected to the sub-cellular surveillance of DNA testing in the receiving country.

At the same time, being a digital refugee comes with a new set of vulnerabilities, some of which stem from digital access to the body, access through which notions of "truth" and "authoritative" determinations about identity and essence derive. 202 Refugees' and migrants' bodies are turned into truth machines, and their stories are trusted less and less. One risk of this "digitalization" is "function creep": using the data collected for different purposes, such as security or crime prevention purposes, 203 or the accessibility of databases to third parties, including, potentially, their countries of origin.²⁰⁴ The test results ultimately remain out of the immigrants' hands: they cannot control the use of their genetic information, and sometimes do not know where that information can reach. In Germany, and in some additional European countries, such data can be stored in a DNA database and exchanged with other European government agencies in the context of crime prevention.²⁰⁵ Immigrants who are tested run the risk of criminalization which other people may evade. 206 This "establish[es] an environment of mistrust" and adds an additional means of surveillance.207

DNA tests are therefore a dangerous addition to existing elements of biopower in immigration regimes, which utilize and expose migrants' bodies

¹⁹⁷ Tapaninen & Helen, supra note 48, at 38.

¹⁹⁸ Maryellen Fullerton, *The International and National Protection of Refugees*, in Guide to International Human Rights Practice 245, 247 (Hurst Hannum ed., 4th ed. 2004).

¹⁹⁹ Hall & Naue, *supra* note 49, at 70–71.

 $^{^{200}}$ Id

²⁰¹ Dove, *supra* note 28, at 468.

²⁰² Lindskov Jacobsen, *supra* note 8, at 155.

²⁰³ *Id.* at 156.

²⁰⁴ *Id.* at 157.

²⁰⁵ Heinemann & Lemke, supra note 46, at 501; Moreno et al., supra note 23, at 272.

²⁰⁶ Heinemann & Lemke, *supra* note 46, at 501.

²⁰⁷ Id.

as their most available form of documentation, the privacy of which can be compromised at a sovereign's whim. Biopower is fed by suspicion of migrants, and it simultaneously feeds that suspicion, especially with respect to refugees.

IV. RACIALIZATION OF IMMIGRATION THROUGH DNA TESTS

Genetic testing contributes to the racialization of immigration and immigration law. I use the definitions of race by Paul Silverstein, according to which race is a "cultural category of difference that is contextually constructed as essential and natural—as residing within the very body of the individual—and is thus generally tied, in scientific theory and popular understanding, to a set of somatic, physiognomic, and even genetic character traits."²⁰⁸ Racialization is defined as "the processes through which any diacritic of social personhood—including class, ethnicity, generation, kinship/ affinity, nationality and positions within fields of power—comes to be essentialized, naturalized, and/or biologized."²⁰⁹

Although the option of taking a DNA test is open to essentially all immigrants, in reality, people of color—especially, though not exclusively, Black migrants from Africa and Southeast Asian migrants—are more likely to be subject to testing. There is at least a correlation between race and the chances of being required to take a DNA test, and it is highly possible that this is no coincidence. Some categories of migrants, such as asylum seekers and family reunification migrants, are more likely than others to be subjected to DNA testing, and people of color are over-represented in these categories. Also, DNA tests are not performed evenly among migrants from different countries of origin. Taitz, Weekers, and Mosca argue that at the time their research was conducted, Finland only required testing from persons from Somalia, Iraq, Angola, and the Democratic Republic of Congo, and Australia required testing in its missions in Vietnam, the Philippines, Cambodia, and Kenya.²¹⁰ In Germany, research suggests that the use of DNA is growing in cases of family reunification for refugees from Africa and Southeast Asia.²¹¹ Countries from these areas frequently appear in a list of forty countries whose documents Germany does not acknowledge, due to an assumption of bureaucratic deficiencies in their population registrations.²¹²

Likewise, in the United States, tests are used in a discretionary manner, targeting persons from places considered to be "high fraud countries" more

²⁰⁸ Paul A. Silverstein, *Immigrant Racialization and the New Savage Slot: Race, Migration, and Immigration in the New Europe, 34 Ann. Rev. Anthropology 363, 364 (2005).*

²¹⁰ Taitz et al., supra note 49, at 29.

²¹¹ Catherine Lee & Torsten H. Voigt, *DNA Testing for Family Reunification and the Limits of Biological Truth*, Sci., Tech. & Hum. Value 430, 440 (2019).

²¹² Heinemann et al., *supra* note 47, at 18–19; Lakhani & Timmermans, *supra* note 24, at 372.

than those from other countries.²¹³ In the past, DHS collected DNA from African refugees who sought admission to the United States, in a way that could be viewed as racially discriminatory, in order to eliminate concerns about fraud within the family reunification program.²¹⁴ The requirement for certain family members of asylum seekers to undergo mandatory DNA testing was limited to persons from specific countries.²¹⁵

Similarly, officials in Canada are more experienced in identifying documents from certain countries, and are trained to treat documents from certain regions (Latin America, Africa, and Asia) as suspect, making it more likely that migrants from those regions will be required to undergo DNA testing.²¹⁶ Thus tests are selectively used, whether consciously or not, against specific groups of undesired migrants: those who come uninvited (refugees), those who are perceived to have a low utility for receiving states (family reunification migrants), and those who arrive from certain developing countries, in order to exclude them and minimize the scope of their rights claim.²¹⁷ Those migrants are more likely to be Black or South Asian, as described above.

This comparative analysis suggests that the use of DNA testing is racialized, despite the optimism that some scholars have expressed that "contemporary biological citizenship, in the advanced-liberal democracies of 'the West' . . . does not take [a] racialized . . . form."²¹⁸ The new technology does not transcend the racialized politics of immigration law.²¹⁹ The DNA molecule has not replaced the population as the unit to be controlled, but rather has become the tool to control populations.²²⁰

DNA testing thus joins other aspects of migration regimes that entrench inequality in access to migration along the lines of nationality and race.²²¹ Countries have historically excluded certain nationals, and some continue to do, subject to minimal exceptions.²²² Temporary protection is offered to indi-

²¹³ Lakhani & Timmermans, supra note 24, at 371–72.

²¹⁴ See JILL ESBENSHADE, IMMGR. POL'Y CTR., AN ASSESSMENT OF DNA TESTING FOR AFRICAN REFUGEES 9–12 (Oct. 2010), https://www.americanimmigrationcouncil.org/sites/default/files/research/Esbenshade_-_DNA_Testing_102110.pdf, archived at https://perma.cc/2XGZ-N2RN; Dove, supra note 28, at 478–79.

²¹⁵ Holland, *supra* note 143, at 1641. These are "priority three" family reunification cases. *See* Dove, *supra* note 28.

²¹⁶ Joly et al., *supra* note 44, at 395–96 (discussing the potential for discrimination against Africans and other non-Western migrants).

²¹⁷ Heinemann & Lemke, *supra* note 46, at 491; *see also* Moreno et al., *supra* note 23, at 265

^{265.} 218 Nikolas Rose, The Politics of Life Itself: Biomedicine, Power and Subjectivity in the Twenty-First Century 132 (2007).

²¹⁹ Heinemann & Lemke, *supra* note 46, at 491; Raman & Tutton, *supra* note 180, at 717.

²²⁰ Raman & Tutton, *supra* note 180, at 717.

²²¹ Spijkerboer, *supra* note 17, at 452.

²²² See, e.g., ANDREW GYORY, CLOSING THE GATE: RACE, POLITICS, AND THE CHINESE EXCLUSION ACT passim (1998) (discussing the exclusion of Chinese migrants in the United States); see also Kritzman-Amir & Ramji-Nogales, supra note 37, at 566 (examining the bans on nationals from certain countries in Israel and the United States).

viduals on the basis of their nationality.²²³ Vetting processes are often differentiated by an immigrant's country, as are visa requirements.²²⁴ Nationality is perceived as a commonly-used determinative factor in immigration law, as opposed to race or religion. However, given the strong correlation between nationality, race, and religion, the de facto result is often religious and racial discrimination.²²⁵

Interestingly, the racialized, selective use of DNA testing stands in contrast to the letter of international immigration law. International refugee law prohibits discrimination among refugees on the basis of their "race, religion or country of origin."²²⁶ The Migrant Works Convention (MWC) provides wider protections from discrimination, including prohibitions on race-based discrimination and some of its proxies: "colour, language, religion or conviction, . . . national, ethnic or social origin, [and] nationality."²²⁷ General international human rights law also prohibits racial discrimination.²²⁸ When refugee law includes a protection from race-based persecution, that protection is interpreted broadly, in a social sense, while the use of DNA tests supports a limited and spurious conception of race as a biological fact.²²⁹

To conclude, DNA tests do not overcome racism and racialization in immigration law but rather coopt and apply them, racializing migration even further, under the guise of scientific neutrality.²³⁰

V. DNA Tests and What They Stand For: Hyper-Individualization of Immigration Control and Managing Suspicions

DNA tests of immigrants are problematic not just because of *who* conducts them (private labs), *what* they control (immigrants' bodies), or even *how* they operate (through disguised racial biases). Rather, they are problematic because of *the ideas they stand for*, encompass, instill, entrench and

²²³ See, e.g., Tally Kritzman-Amir, *The Shifting Categorization of Immigration Law*, 58 COLUM. J. TRANSNAT'L L. 279, 294–97 (2020) (discussing temporary protection).

²²⁴ See, e.g., Kritzman-Amir & Ramji-Nogales, supra note 37, at 588–89 (on the differential visa requirements for people of different nationalities entering the United States).

²²⁶ Convention Relating to the Status of Refugees art. 3, July 28, 1951, 189 U.N.T.S. 150 (entered into force Apr. 22, 1954) [hereinafter 1951 Refugee Convention].

 ²²⁷ ICRMW, *supra* note 189, art. 7.
 ²²⁸ See, e.g., International Covenant on Economic, Social and Cultural Rights art. 2, Dec.
 16, 1966, 993 U.N.T.S. 3 [hereinafter ICESCR]; ICCPR, *supra* note 105, art. 26; G.A. Res.
 217 (III) A, art. 7, Universal Declaration of Human Rights (Dec. 10, 1948); International Convention on the Elimination of All Forms of Racial Discrimination, Dec. 21, 1965, 660 U.N.T.S. 214.

²²⁹ James C. Hathaway & Michele Foster, The Law of Refugee Status 396–97 (2014) ("In sum, the contemporary conceptualization of the Convention ground 'race' is consistent with the notion that 'race' is a socially constructed notion. Hence, 'race' for Convention purposes may be defined by ethnicity or cultural or linguistic distinctiveness, and frequently overlaps with other Convention grounds.").
²³⁰ Heinemann & Lemke, *supra* note 46, at 491.

reproduce about who migrants are and how migration control should be exercised.

In essence, DNA testing in immigration is in line with the methodological hyper-individualization of immigration law. In a different article, I argued that, for the most part, immigration law is methodologically individualistic:

It assumes that immigration can be understood, controlled and regulated by understanding the actions and circumstances of individual migrants. It thus emphasizes measures taken with respect to individuals, which seek to address their actions and motivations, while purposely ignoring the social institutions in which these individuals are embedded—namely families, communities and markets.²³¹

The protagonist of immigration law is the alien, immigrant, or refugee,²³² since understanding and controlling her as an individual is key to the enterprise of understanding and controlling migration. The increasing reliance on DNA tests supports this argument. DNA tests are hyper-individualized in the sense that they engage in a sub-cellular level of investigation about migrants, as opposed to a broader investigation of a person's relationships, country of origin, claim for status, and evaluation of context. They reflect a failure to view immigration as something that can be understood, controlled, or regulated through a focus on a unit larger than the individual.

This problem with hyper-individualism that is inherent to DNA testing is perhaps more apparent in the case of family reunification proceedings. Genetic kinship testing is individualizing, in that it examines kinship through one's relationship with one's somatic individuality.²³³ It is a process in which one is required to manage the implications of one's own genome.²³⁴ This individualistic conception of kinship stands in sharp contrast to the fact that many countries, in principle, exhibit a preference for family unification

²³¹ Kritzman-Amir, *supra* note 18, at 652.

²³² See, e.g., 8 U.S.C. § 1101(a)(3), (15), (42). The differentiation between categories of migrants is a highly contested one, and discussion of suggestions for how the lines between categories of migrants (e.g. refugees and migrants) should be drawn fall outside the scope of this paper. It is sufficient to say that as a matter of current law, a refugee is defined as a person who "owing to well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, unwilling to avail himself of the protection of that country." 1951 Refugee Convention, supra note 226, art. 1(A)(2). For critical reflections on this distinction, see Rebecca Hamlin, The Migrant/Refugee Binary and State Responses to Asylum Seekers 1 (2018) (unpublished manuscript) (on file with author); Tally Kritzman-Amir, Socio-Economic Refugees (2009) (Ph.D. dissertation, Tel-Aviv University) (on file with author).

 $^{^{23\}dot{3}}$ Nikolas Rose & Carlos Novas, *Biological Citizenship*, *in* Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems 439, 441 (Aihwa Ong & Stephen Collier eds., 2005).

in their immigration regimes. DNA tests actually prove that family life is not taken seriously. It is not the family life that is at the core of the immigration regime. A family life focus would examine the depth of the relationships, the mutual interdependence, and the importance of staying together for one another's welfare. Instead, the traces of the family connections within the individual's body are what counts.

By focusing on DNA to prove kinship, the tests effectively endorse a biological conception of the family, over a sociological conception of it.²³⁵ They reflect a primordial understanding of kinship and blood ties.²³⁶ This occurs even in countries which specifically prohibit discrimination between biological children and non-biological children,²³⁷ and results in a situation in which many of the above mentioned countries apply to their own citizens an increasingly pluralistic and broad interpretation of the family, but "reduce[] to biology" the families of migrants.²³⁸ The decision to resort to DNA testing derives from a space of unequally distributed trust and status, in which migrants are untrustworthy, and nationals are to be trusted. This creates a double standard regarding the nature of the family.²³⁹ Tests can only identify "blood" relations, but not other forms of kinship, such as adoptees and in-laws.²⁴⁰ Proving adoption, for example, might be impossible in light of the heavy reliance on DNA tests, which entrench the biological perception of families.²⁴¹

In addition, the tests require migrants to expose their families to emotional risks. When DNA tests are forced and reveal a lack of biological kinship, the discovery impacts the lived experiences of the family unit: a child discovers that she was adopted or a man discovers that his partner was impregnated by someone else, sometimes even as a result of rape.²⁴² These revelations have harsh emotional consequences for both children and parents.²⁴³ Families may be devastated if the results of DNA tests contradict what they think or believe about the unit, disrupting or even destroying family relationships.²⁴⁴ The implications may be especially harsh, given that children might have been conceived in difficult situations of chaos, war,

²³⁵ See Heinemann et al., supra note 47, at 14; Taitz et al., supra note 49, at 26–27. A different approach that combines the use of DNA tests and an endorsement of the family as a sociological category exists in Finland. Tapaninen & Helen, supra note 48, at 39.

²³⁶ Kim, *supra* note 58, at 772.

²³⁷ Heinemann et al., supra note 47, at 26.

²³⁸ Skinner, supra note 46, at 8; see also Taitz et al., supra note 49, at 26.

²³⁹ Torsten Heinemann & Thomas Lemke, Suspect Families: DNA Kinship Testing in German Immigration Policy, 47 Socio. 488, 491 (2013).

²⁴⁰ Abel, *supra* note 6, at 4.

²⁴¹ Barata et al., *supra* note 24, at 620.

²⁴² ESBENSHADE, *supra* note 214; Barata et al., *supra* note 24, at 618–21.

²⁴³ Taitz et al., *supra* note 49, at 26–28 (describing a case of a family that discovered that neither the father nor the mother are actually biologically connected to the child, who they mistakenly claimed after years of separation, and explaining the especially devastating consequences for children); Barata et al., *supra* note 24, at 599.

²⁴⁴ Taitz et al., *supra* note 49, at 26–28; Barata et al., *supra* note 24, at 620.

crime, and loss.²⁴⁵ Broader implications include social stigma, social expulsion, divorce, discrimination, or abuse.²⁴⁶ Families are not offered counseling or any other form of assistance in order to mitigate the impact of the DNA testing on the family, either before or after the tests.²⁴⁷ It is perhaps possible to argue that the tests themselves constitute a violation of the right to family life,²⁴⁸ which is problematic in and of itself, but even more problematic when we take into account the fact that the self-declared focus of the immigration and asylum regimes of many countries has been the promotion of family unity.²⁴⁹ In that context, it is important to remember that families have been selectively protected, with minor children and spouses receiving the most support, and other family members enjoying much more limited access to family reunification.²⁵⁰

A telling example is the case of the Owusu family.²⁵¹ Mr. Owusu applied to bring his four sons to the United States, his country of citizenship, after his wife passed away. All five family members underwent DNA tests. Results indicated that only his oldest son was actually genetically related to him, and only that son was granted a visa. The future of the relationship between Mr. Owusu and his sons, and that of the brothers with each other, relationships "forged by years of interaction, care and sacrifice,"²⁵² was determined at the cellular level. A biological conception of family ties, which results from reliance on DNA tests, and which differs from the sociological perception of family ties applied in legal contexts outside immigration law,²⁵³ demonstrates that the family relationships of migrants are not taken seriously.²⁵⁴ Hearing Mr. Owusu and his sons weighing evidence about their relationship, and seeing them interact, would have been a more serious way to consider their relationship.

Since one's immersion in relationships is often equated with humanism,²⁵⁵ the fact that migrants' relationships are based on genetic findings re-

²⁴⁵ Barata et al., *supra* note 24, at 618-20.

²⁴⁶ Id. at 621.

 $^{^{247}}$ For the recommendation to offer such counseling, *see* UNHCR Note on DNA Testing, *supra* note 194, ¶¶ 16–27.

²⁴⁸ ICCPR, *supra* note 105, arts. 17, 23, 24; ICESCR, *supra* note 228, art. 10.

²⁴⁹ See, e.g., Holland, supra note 143, at 1639.

²⁵⁰ See, e.g., Donald Kerwin & Robert Warren, Fixing What's Most Broken in the US Immigration System: A Profile of the Family Members of US Citizens and Lawful Permanent Residents Mired in Multiyear Backlogs, 7 J. MIGRATION & HUM. SEC. 36, 39–40 (2019).

²⁵¹ Villiers, *supra* note 123, at 248–49.

²⁵² Id. at 249.

²⁵³ Id

²⁵⁴ Kritzman-Amir, *supra* note 18, at 661–64 ("Familial relationships are thus inferior to the interests of maintaining sovereign control over immigration and its 'orderly,' individualistic regulation.").

²⁵⁵ See John Christman, Relational Autonomy: Liberal Individualism, and the Social Constitution of Selves, 117 Phil. Stud. 143, 144–45 (2004); see also Jennifer Nedelsky, Law's Relations: A Relational Theory of Self, Autonomy, and Law 32–33 (2012) (noting that one of the contributions of feminism to relational theory is that it unlikely to "romanticiz[e] community or relationship").

flects a retracted notion that migrants' humanity is partial at best. Determining their family reunification applications on the basis of DNA tests, as opposed to a social understanding of family life, suggests that their relationships are undervalued and essentialized, compared with those members in the national "us." Attributing nationalities to migrants on the basis of genetic testing minimizes their sense of belonging, identity, community and self-determination. Putting them under genetic surveillance renders them perpetual suspects. Accordingly, since the migrant is not perceived as having full personhood, her expectations of privacy are not fully considered and are often compromised. Familial relationships are thus inferior to the interests of maintaining sovereign control over immigration and its "orderly," individualistic regulation.²⁵⁶

DNA tests deny the agency and subjectivity of the migrant to a large extent, and minimize opportunities for the migrant to present her case, share her story, justify her migration, and receive some recognition and empathy.²⁵⁷ This was the description that was given to the HPPP tests in the United Kingdom. The tests, which, as mentioned above, sought to identify migrants' country of origin, were experienced as very impersonal, and as preventing a chance to engage with the authorities.²⁵⁸ Rather than relying on information received through engagement, the authorities use DNA as the determinative factor:

The use of biometric and linguistic technologies shifts the evidence from the applicant's personal narrative of persecution to seemingly objective means of assessing certain aspects of identity. However, such technologies of identity do not simply offer more objective means of confirming or disconfirming conventional identity claims; they actually redefine the social categories of identity on which immigration and asylum decisions are based.²⁵⁹

In other words, in some countries, DNA tests substitute for not just documentation, but also testimony.²⁶⁰ They render redundant the need for immigration bureaucracy to deal with the challenges of multicultural engagement, the complexity of interviews, the difficulty of fact-finding, reliance on translators,²⁶¹ and the challenges of interviewing a child.²⁶² They remove the ability and opportunity to empathize with the migrant. The inter-

²⁵⁶ Kritzman-Amir, *supra* note 18, at 664.

²⁵⁷ At the same time, it might also save migrants, especially asylum seekers, the trauma of having to relive their persecution in their interviews.

²⁵⁸ See Tutton et al., supra note 11, at 746.

²⁵⁹ I.A

²⁶⁰ See Barata et al., supra note 24, at 614–15. This is also the case in Germany. However, in Austria, the decision is made on the basis of the DNA testing and the interview. See Tapaninen & Helen, supra note 48, at 48.

²⁶¹ See Anitta Kynsilehto & Eeva Puumala, Persecution as Experience and Knowledge: The Ontological Dynamics of Asylum Interviews, 16 Int'l Stud. Persp. 446, 447 (2015).
²⁶² See Weiss, supra note 182, at 81–84.

view of migrants and refugees can be a difficult and ethically challenging experience. The migrant's privacy is compromised, and her ability to refuse to cooperate with the authorities to protect her privacy is limited.²⁶³ Yet an interview still provides a chance for greater complexity and multidimensionality in evaluating an individual case, compared with the one-dimensional, oversimplified conclusion of a DNA test, obtained through a coercive breach of privacy.

Additionally, DNA tests result from, and at the same time entrench, the idea of the migrants as suspects. DNA testing is necessary because, allegedly, the migrants cannot be trusted and have reasons to try to misrepresent crucial facts about themselves. Part of the difficulty of recognizing migrants' familial relationships as functional, intentional, and genuine stems from an ongoing and constant effort to examine the authenticity of migrants' familial relationships, which are inevitably suspected of being fraudulently created to obtain the sought-after immigration benefit.²⁶⁴ But according to modern immigration regimes, the "truth" is within the individual, in her body. The migrant's own evidence regarding social context, situation in country of origin, or familial relationships cannot be trusted as much as that individual, biological evidence. In other words, not all familial relationships are protected, but only those perceived as living up to an imaginary "bona fide" standard.²⁶⁵ At the same time, since in many cases people find that their genetic results are inconsistent with their own understanding of their identity, migrants are labeled as fraudulent through no fault of their own.

DNA tests also distort the evidentiary standards of proof needed to prove family ties. For example, if in the United States, the requirement previously was to provide (at most) clear and convincing evidence²⁶⁶ of the alleged family ties, the reliance on DNA tests effectively raised the standard to the standard of beyond a reasonable doubt, or to the alleged scientific certainty of DNA tests. If a person refuses to take the DNA test, for any reason, that refusal is often perceived as an attempt to hide something.²⁶⁷

Conclusion

DNA tests are treated as a discrete phenomenon in the immigration context. Despite significant critiques of the tests, much of the scholarship on DNA testing of migrants concludes with reminders that DNA tests can be helpful and beneficial for refugees and migrants, and are not inherently

²⁶³ Id at \$1_\$\$

²⁶⁴ See Kerry Abrams & R. Kent Piacenti, *Immigration's Family Values*, 100 Va. L. Rev. 629, 688–89 (2014).

²⁶⁵ Kritzman-Amir, *supra* note 18, at 662.

²⁶⁶ See, e.g., Miller v. Albright, 523 U.S. 420, 431 (1998); cf. Matter of Chawathe, 25 I. & N. Dec. 369, 375 (B.I.A. 2010) ("Except where a different standard is specified by law, a petitioner or applicant in administrative immigration proceedings must prove by a preponderance of evidence that he or she is eligible for the benefit sought.").

²⁶⁷ See Heinemann & Lemke, supra note 46, at 501.

flawed.²⁶⁸ In addition, several scholars who have studied this phenomenon have made some recommendations on how to render DNA tests less intrusive to refugees' privacy and less harmful for their family life, suggesting a broadening of the conception of the family, or using DNA testing as a measure of last resort.²⁶⁹

But the use of DNA tests is so expansive and is still expanding²⁷⁰—it is used for so many purposes, ranging from family reunification to identification and surveillance, and is so widespread, that it warrants a different set of conclusions. It is a dramatic, intrusive measure, which has been normalized through its reproduction in the particular context of migration. This paper has sought to address this normalization—the conditions that enable this normalization and its implications. As scientifically and technologically unique as DNA testing may be, this paper argues that it is, in a sense, "ordinary," and in line with general exclusionary policy practices that form the landscape of immigration and asylum regimes. The practice raises many of the concerns inherent to immigration regimes today, yet it achieves a veneer of respectability, because it is rooted in scientific, and therefore allegedly objective, measures.

This paper has provided a closer look at the practice. First, it has shown that DNA tests are operationalized by private laboratories, which impact the decisionmaking process of the sovereign, much as other private entities have started fulfilling different functions in immigration regimes. Once privatized, immigration is marketized, and the migrant becomes a commodity. In this environment, the interests of the private business and the sovereign intertwine until they become indistinguishable, with no accountability for the human rights of migrants. The tests are also an application of power on migrants' bodies. The bodies of migrants are treated as a reliable source of evidence and information, as opposed to the migrants' words and documents, which are suspect. This carries a heavy price in terms of migrants' privacy. States invest differential efforts in mitigating the violation of privacy, but they cannot eliminate it. Different migrants run different risks of paying this price, and refugees and migrants from developing countries are particularly susceptible. Thus, the way DNA tests are run contributes to immigration regimes that are already racialized. The tests deepen the pre-existing inequality in access to global mobility. Finally, the reliance on DNA builds and adds to a hyper-individualized immigration regime, which tends to neglect the existence and importance of the relationships and social contexts of migrants. It is a system that is inconsistent with the regime's stated commitment to preserving the family unit. This hyper-individualized approach is

²⁶⁸ See, e.g., Barata et al., supra note 24, at 623–36; Holland, supra note 143, at 1681–82; Villiers, supra note 123, at 268–71.

²⁶⁹ See, e.g., Holland, supra note 143, at 1678–81; Barata et al., supra note 24, at 623–36.
²⁷⁰ See Collection and Use of Biometrics by U.S. Citizenship and Immigration Services, supra note 4.

helpful for constituting, through DNA testing and other methods, the migrant as "othered" and as a suspect.

These concerns about the use of DNA tests in immigration are broad and indicative of immigration and asylum regimes as a whole. DNA tests represent some of the trends in immigration and asylum regimes, perhaps in an extreme form. Therefore, a thorough examination of DNA tests is actually an opportunity to think deeply about what we want from our immigration and asylum regime. To what extent do we wish for it to be guided by privatized notions of sovereignty? How adequate is it to even rely on the presumptive legitimacy of sovereignty in immigration and asylum regimes that are so heavily privatized, with such loose regulation of the private powers? Is the sovereignty argument outdated? How appropriate is it to subject human bodies to the indignation of DNA tests in migration processes, and to make political decisions on the basis of their bodies? Should we allow immigration and asylum to further exacerbate race and class disparities in access to international mobility? Should we name and discuss the racialization of sovereign realms, thereby exposing the racism inherent in conditioning immigration policy on migrants' national origins? And should we continue to think within immigration regimes in an overtly individualized way, or would it be more beneficial to think about migration as a contextual, social phenomenon, and of migrants as embedded in contexts and relationships?²⁷¹ Should we treat a broad and diverse population as suspects, on the mere grounds of them being non-nationals? These are fundamental questions, which do not only come up in the context of DNA tests but are also integral to a growing social enterprise of managing migration.

In other words, while it is important to critically scrutinize the use of DNA tests in immigration, this critique should not obscure the bigger picture. The concerns addressed in this paper are not idiosyncratic to the tests but rather arise from other mechanisms of immigration control, too. We cannot make do with merely considering whether we should continue to use DNA and on what terms. Instead, we should see the tests as an opportunity to consider whether we are comfortable, morally and legally, with immigration regimes that are privatized, racialized, and rely on hyper-individualistic exhibitions of biopower, at the expense of migrants' human rights.

²⁷¹ See Kritzman-Amir, supra note 18, at 653-54.