Chapter 11

Evolving Conceptual and Policy Challenges

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In this book we set out to explore the conceptual challenges posed by the presence of migrants with irregular immigration status in Europe and the evolving policy responses. In contrast to many earlier texts, our focus has been on irregular migrants living in Europe, not crossing its borders; and viewed not as a temporary crisis but as a continuing, structural feature of European societies. The drivers, forms, and consequences of irregular migration are nevertheless in transition and a key theme throughout has been that of change. Conceptual tools are needed to explain the complex social realities of this section of the migrant population; coupled with a need to unravel the legal and policy responses at the European, national and municipal levels: their drivers, multiple actors and potential future course.

Such a task required a multi-disciplinary approach to enable us to range across economic, legal, political, sociological, philosophical and ethical questions. Our authors, some of whom participated in the Oxford symposium from which the idea for this book was born,¹ have brought together evidence from different parts of Europe and sectors of its economies and communities to highlight recent trends. From their analyses, key themes emerge.

¹ 'Strategic Approaches to Migrants with Irregular Status in Europe', Autumn Academy 2017 held at St. Hugh's College Oxford from 18–22 September 2017. <https://www.compas.ox.ac.uk/event/autumn-academy-2017-strategic-approaches-on-irregular-migrants-in-europe/>

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11.1 A Structural Phenomenon – In Flux

First, while it is clear that irregular migration is a structural feature of contemporary Western societies, we see that the drivers and characteristics of that phenomenon are in flux. The structural determinants in sending and receiving states remain broadly those of economic and demographic pressures—the demand for low-wage workers and the willingness of migrants with irregular status, through lack of alternatives, to provide it. Together, conditions in receiving and source states create a powerful pull/push mechanism that defies border and internal controls. We see, in the contributions from Triandafyllidou and Bartolini (Chap. 2), that the forms of irregularity that emerge are nevertheless shaped by current economic conditions and contemporary labour market reforms. The fragile economic recovery in many European countries in the wake of the economic crisis of a decade ago, coupled with labour market reforms designed to reduce costs and increase flexibility, have created spaces which attract and retain those whose irregular status makes them willing to tolerate precarious conditions. Restrictive policies that limit legal channels for labour migration and family reunion and prioritise temporary migration exacerbate that dynamic. Hence labour market reforms and enforcement of employment legislation will be more effective in addressing irregular migrant employment than migration controls.

Taking their analysis forward through a deep dive into the intersection between irregular employment and irregular migration in domestic and care work, agriculture and construction, Triandafyllidou and Bartolini (Chap. 8) expose the close, interactive relationship between demand for labour in those sectors, restrictive labour migration policies, and irregular work. The differing labour market dynamics in each country, modes of regulation and of funding in public sector jobs, coupled with degrees of social acceptance of economic informality, shape the patterns of irregular work across sectors and the gender balance of that workforce. There is a continuum of irregular work that, while undeclared and insecure, is widely accepted by the public. The overall impact of irregular migrant employment remains unclear as regards competition with natives and driving down wages, but what is clear is that there is no single national interest in this area: rather, a pattern of beneficiaries (including employers, but sometimes also fellow native workers who may see their jobs re-classified, leaving those with lower pay and worse conditions to the irregular migrants) and those who lose out.

Alongside structural labour market conditions, conflicts and crises in the Middle East and North Africa have also been drivers of recent arrivals and, where asylum is not sought or is refused, a source of irregular stay. The top nationalities of migrants detected as ‘illegally’ present and of those who lodged an asylum application in the EU are almost the same, so that policy shifts on handling claims, rejection rates, and enforcement are also part of the changing dynamic that as migration scholars we need to understand. There is a clear risk today of an increasing population in limbo, whose status is in process but whose rights, particularly regarding employment, are unclear. Thus delays or reluctance to accept claims for international protection or

both may inadvertently provide exploitable and vulnerable migrant labour to unscrupulous employers.

Just as labour market conditions help to shape the irregular migrant population, we see how that population can in turn shape local labour markets. The scale of arrivals from across the Mediterranean has led to the emergence of a new economy of migrant and asylum seeker reception in the post-2015 period in peripheral border areas of Italy and Greece. That development is so significant, Bartolini, Mantanika and Triandafyllidou (Chap. 9) argue, that it provides an opportunity and even a strategy for survival in some border regions. In a southern European context of relatively high unemployment and economic austerity, the management of the ‘migration crisis’ had put additional strain on stretched public finances. EU funding for reception has then been a key factor in the arrivals being a catalyst for the creation of a new set of economic activities: of occupations, services, specialist training and migration-related branches of professions. We have, in effect, seen the emergence of a new *reception industry* which, with increased spending by those providing services, has enhanced the employment of both locals and settled migrants. Funds have in some cases been steered by policymakers towards depressed and depopulated areas. Municipal staff laid off in the economic downturn have found reemployment while IGOs and NGOs have expanded their remit and activities. Refugees have themselves changed the character of the local labour market, a ‘refugeeization’ of the migrant workforce, finding work within and outside of the reception system to the potential disadvantage of low-skilled local residents.

11.2 Irregularity – Fluid in Forms and Implications

While a structural feature, irregularity is thus fluid in its forms and implications. Irregularity itself has long been recognised by scholars as a multi-faceted status: not a false binary of legal-illegal, regular-irregular, but shades of grey: degrees and types of irregularity and semi-regularity, including ‘befallen’ regularity, where the rules are, for the migrants, impossible to fulfil or create conditions in which periods of regularity lapse intermittently into irregularity (Triandafyllidou 2010, 2013). Irregularity is thus not only multi-faceted but, for each individual, fluid; a status that can evolve between differing forms and between periods of regularity and irregularity. The paths to, and patterns of, irregularity have moreover increasingly diversified over time; as have the barriers to return and its sustainability. Thus, there are multiple possible intersections of work status, citizenship, and residence status. The evolving diversity of the population with irregular status compounds the difficulty of appropriate terminology (hence our choice simply of ‘irregular’), and of collecting meaningful data—challenges which migration scholars face in particular in this field.

Governments may see irregular migrants as targets of enforcement action, but they are also people and like others are active to varying degrees in society: as parents, workers, patients, students, and contributors to community life. Some, as

Chimienti and Solomos (Chap. 6) discuss, are political actors. Irregular migrants thus develop reciprocal relationships and identities unrelated to their immigration status which bind them to their locality and others to them. Here enforcement comes up against social reality. Irregular migrants cannot be the subject of enforcement action alone; rather, they pose multiple moral and practical challenges to which a range of political and policy responses are required. Migration policies fail not only because they do not address the root causes of migration, the structural conditions in which it persists, but also because of the complex social reality of migrants' lives and relationships after they have arrived (Castles 2004). Policy responses—whether at EU, national or sub-state levels—can only be understood within an understanding of irregular migration, pre- and post-arrival, as a structural phenomenon, limiting the efficacy of enforcement measures designed to deter, detect, and remove.

11.3 New Forms of Multi-polar, Multi-level Governance

As a result, we have seen the emergence of new forms of governance engaging not only multiple state and non-state actors but new forms of multi-level governance as the remits of EU, national, and local authorities overlap in key policy areas. Neoliberalism has de-centred the state, devolving greater responsibility for economic and social policy agendas to private actors and sub-state tiers. While national governments have led responsibility for policies on *irregular migration*, there is a level of shared responsibility with sub-state tiers for policies impacted on and by *irregular migrants*, albeit one in which there is a clear hierarchy in the governance structure. Policy actors with apparently diverging agendas, within and between tiers of governance, compete for authority and legitimacy to secure policy reforms that reflect their enforcement or inclusion goals.

Tensions between competing policy imperatives have been well-explored in the literature in relation to national policy agendas on regular migrants but, as Chauvin and Garcés-Mascreñas (Chap. 3) argue, those tensions are less well understood in relation to irregular migration; and, in that context, between the national and local state. Yet, as Spencer (Chap. 10) writes, it is increasingly important to understand why municipal agendas on irregular migrants often diverge from those of national governments and, on occasion, drive national agendas from below.

Across Europe, municipalities enjoy differing levels of autonomy from national governments and have differing scope for policy responses that diverge. While some are no more inclusive than their national counterparts, others, facing the consequences of irregular migrants' exclusion from authorised work and welfare support, adopt a more inclusive approach that stretches the boundaries of their legal competence. Recent analyses of the political and legal conflicts that have emerged see the local state pitched against the national state, their actions deemed to run counter to national immigration and welfare policies (Genç 2018; Spencer 2018). The political tensions and litigation that have resulted, coupled with non-compliance and low-

visibility measures by municipalities—a ‘de-coupling’ in multi-level governance on this issue—supports that interpretation.

Yet, it would be simplistic—as Chauvin and Garcés-Mascreñas argue—to suggest that national policies exclude, while local policies include. Just as national policy frameworks on irregular migrants can contain inclusive measures (Spencer and Hughes 2015; Schweitzer 2018), Spencer shows that local state agendas may be less divergent from the dominant, national, exclusion agendas than the tensions between them might imply. Rather, some municipal measures contribute to immigration enforcement, facilitating voluntary return and compliance with national return procedures, while others are in line with shared economic and social policy goals. If, she argues, we recognise municipalities as part of the state and, following Lahav (1998), understand the state as devolving responsibility to public and private actors to *enhance* its capacity for migration control not to relinquish it, we may come closer to understanding the role that municipalities play. What we are witnessing in municipal activism on irregular migrants may not be a loss of national control to the local state but a reinvention of it at the local level.

Irregular migrants themselves, despite their vulnerability and limited resources, are also actors in this field, engaging in activism to secure greater inclusion. Chimienti and Solomos highlight their transnational mobilization to gain access to rights and protection: transnational because of limited opportunities for influence at the local and national levels and because of the transnational character of irregularity and the exclusion they seek to overcome. Mobilisation—local, national and transnational—is a response when their semi-inclusion is challenged and repressed. Here we can see another dimension of the multi-faceted state of irregularity: a continuum of ‘weak agency’ for survival, in local and national mobilisations, that is existential in seeking self-preservation and solidarity and not system change, through to transnational mobilisations that do seek broader transformative demands, exploiting modern technologies of communication and a new repertoire of actions. The outcomes can be symbolic, providing hope, and concrete in galvanising local movements and securing limited policy outcomes. Perhaps most significantly, transnational mobilisation highlights the need for a global approach to migration that engages sending and destination countries and migrants themselves.

11.4 Symbolic Responses

Spencer asks why, if inclusive local measures do at least in part contribute to national agendas, national governments are forceful in repudiating them; and municipalities, through low visibility provision of services, show their concern to avoid that response. Among the potential explanations she posits is that negative national responses may in some cases be more symbolic than substantive—intended to persuade the public that action is being taken to thwart inclusive local measures rather than having the actual intension of so doing.

Ataç and Schütze (Chap. 7), drawing on Slaven and Boswell (2018), explore the use and significance of symbolic policy-making in Austrian national policy responses towards non-removed rejected asylum seekers following the 2015 ‘emergency’ when a short-term welcoming approach was replaced by tough enforcement and return measures. While some measures were intended to have substantive effect in addressing the deportation gap, the government faced constraints in the steps it could take including cost-efficiency, legal norms, and opposition from sub-state tiers. Consequently, the authors show the extent to which a series of symbolic policies also emerged, aiming simply to signal to the electorate the government’s exclusionary intent. The signal such measures also send is that this section of the population poses a threat. Thus, as the authors remind us, signals also steer, just as steering sends signals. In their analysis they demonstrate the importance in any migration policy analysis of considering the interplay of the symbolic and substantive dimensions of policies and the ways in which they are used strategically to achieve different aims.

11.5 Evolving Balance of Exclusion and Inclusion in Policy Interventions

Notwithstanding measures with only symbolic intent, substantive exclusion measures are the norm. Irregular migrants are regularly excluded from the right to work and to access welfare support, measures intended to deter irregular arrival and stay. Delvino (Chap. 5) recalls the legal, treaty basis of the EU’s focus on ‘measures to combat illegal immigration’ and the marked trend at the national level since the late 1990s to complement border controls with measures to exclude irregular migrants from public services, require service providers to report on their presence, and use criminal law to punish irregular entry and/or stay.

Yet we know that despite this substantive and rhetorical emphasis on enforcement, European governments have also—as a matter of law and policy—been responsible for a process of semi-inclusion of irregular migrants. Delvino sets that countertrend in the context of enforcement failing to eradicate irregularity. The scale of irregular arrivals from the Mediterranean region, and limited effectiveness of return procedures, alone demonstrate that no fortress is impregnable, requiring adaptation to accommodate a resident irregular population. At EU level we see the trend in the welfare safeguards, albeit modest, guaranteed in the Returns Directive (2008); and more recently, safeguards for victims regardless of status in the Victims Directive (2012). The reiteration in the European Pillar of Social Rights (2017), however, that the application of its rights and principles is explicitly restricted to those who are legally resident in the EU is a reminder of the limits to which acceptance of the need for inclusion has reached. The fortress, as Delvino concludes, is not breaking down, merely crumbling at the edges. That is no less true at national level, yet we see a variable geography across the EU of modest entitlements to

healthcare, education and other services, with notable recent instances of extensions of rights, not least for children and other vulnerable groups. There is a clear if modest countertrend towards a more pragmatic recognition of irregular migrants' residence in European societies. The instances of inclusion are not temporary measures but an integral part of the legal and policy frameworks of the EU and its member states.

We can thus say that while policies on *irregular migration* at the EU and national levels are still control-oriented, i.e., seeking to reduce its scale, policies on *irregular migrants* have both exclusive and inclusive dimensions. The law excludes and includes at the same time. Internal controls foster a hostile environment while simultaneously accommodating the reality of a resident population with irregular status. Cases of decriminalisation of irregular stay, 'earned' regularisations, extension of access to services and safe reporting of crime, while limited relative to the thrust of exclusionary measures, buck the trend and require explanation.

11.6 Moral Economy of Irregularity

Understanding this process is one of the most significant conceptual developments in the field, to which Chauvin and Garcés-Mascreñas have made a substantial contribution. The state, they argue, faces contradictory imperatives that require it to choose whether to exclude irregular migrants or to embrace the population in its entirety. They review the analyses of this tension found in the literature and find wanting the familiar argument that the primary driver of inclusion is the benefits of foreign labour to capitalist economies, asking why states then often choose to restrict labour mobility. While it is true that criminalisation of labour enhances scope for exploitation, why then have periodical regularisation programmes? Likewise, they acknowledge the role of human rights norms in restraining government actions, but find the argument weakened by the persistent illiberalness of democracies in other respects, and contradictory to their core claim: that inclusiveness is part of the state's *raison d'être*, not imposed against its will. Capacity and cost limitations can thwart that will but cannot explain resort to inclusive measures.

Chauvin and Garcés-Mascreñas thus look for an alternative explanation for inclusion and, following Foucault, find it in governmentality—in the state's need to ensure the predictability of collective conduct. Ability to govern the population becomes more important than deportation; regulating the population more important than drawing lines between those who belong and those who do not. A moderate loss of sovereign control, they argue, may be a necessary price to pay. Governmentality may, Spencer suggests, be an even greater driver of inclusive measures at the local level where the consequences of exclusion are most keenly felt, whereas national governments also have to contend with the high political salience of immigration control.

Formal inclusion, as a matter of law not an outcome of street bureaucrats' informal discretion or migrants' agency, changes the boundaries of citizenship from

which irregular migrants are no longer entirely excluded. Rather, “illegality” does not function as an absolute marker of illegitimacy, but rather as a handicap within a continuum of probationary citizenship (Chauvin and Garcés-Masareñas 2012). This analysis forces us to reject binary conceptions of citizens versus non-citizens, legitimate versus illegitimate, deserving versus non-deserving members of society; even national versus local, as inclusion is seen to be an imperative not just for local administrations but for the national state itself. Ironically, the only place where nation-state sovereignty does exhibit as a clear citizenship binary may be in the distinction between citizens and non-citizens abroad; that is, located outside of the nation-state itself.

11.7 Tension Between Universality of Human Rights and the Hierarchy in National Laws

The uncertain boundaries in this moral economy of irregularity, in which we see irregular migrants constructed as more or less illegal, more or less deserving of inclusion, are reflected in the contradiction between the universality of international human rights standards and their limited realisation in practice for those with irregular migration status. While it is the universality of human rights that is the source of their normative power, affirmed in every major international and regional human rights instrument, it is not reflected in the hierarchical approach of national laws where non-citizens are regularly afforded fewer rights than citizens. That hierarchical approach, privileging members of the civic community over outsiders, is generally accepted as a desirable, fixed, and necessary element of a state-centred system of global governance. Thus, O’Cinneide (Chap. 4) shows that the presumed need to preserve national immigration controls trumps the logic of universal rights. Irregular migrants then experience a double layer of exclusion, denied the entitlements enjoyed by citizens but also the lesser privileges accorded to migrants with regular status. They experience a ‘bare life’ without the shelter of a civic identity, with significant exclusion from essential services, and the constant threat of removal.

For irregular migrants, the comprehensive protection ostensibly provided by universal human rights standards can be limited in their application by governments because the terms of the standards are diluted or insufficiently well developed in relation to this group of residents (as particularly in the case of welfare rights), resulting in the acute vulnerability that human rights law is intended to prevent. Few rights are absolute, and less favourable treatment of irregular migrants by states is not deemed to constitute a breach of their legal obligations if their treatment is objectively justifiable in achieving a legitimate aim (such as immigration control) *and* proportional. Applying that test, the courts have regularly given European governments’ considerable leeway in restricting the rights of irregular migrants for whom it is sometimes held they have limited responsibility. Limited rights of access

to the courts translates into limited opportunities by migrants themselves to challenge the proportionality of their exclusion.

Yet O’Cinneide is confident that space remains for the incremental development of human rights standards as they apply to irregular migrants. For governments, success in arguing that restrictive measures are proportional is not guaranteed. Pressure to show that justification can deter their introduction; and recent legal challenges by non-governmental organisations and the inclusive practices of municipalities have begun to open such measures up to legal and political contestation. The invoking of international standards in discourse on national law and policy by state and non-state actors is serving to add social pressure to adhere to standards beyond any compliance achieved through formal mechanisms. As Oomen and Baumgärtel argue (2018) citing international human rights standards and norms in justification, municipal ‘legislation from below’ has introduced a new frontier in the development of a multi-layered system of rights protection.

11.8 An Evolving Research and Policy Agenda

When Bommers and Sciortino wrote the conclusion to their seminal text on irregular migrants in Europe, *Foggy Structures*, in 2011, they emphasised some of the themes highlighted in this book. It is instructive to see what has also changed in the intervening years. They drew out the significance of irregular migration as a structural, endemic feature of contemporary societies; the nature of irregularity as a multi-layered status that does not define individuals but their relationship with the state; and the social conditions and informal relationships that enable irregular migrants to survive. Prior research, they argued, had more often focused on illegal border crossing than on the social structures in the receiving country that enable the irregular migrants to maintain a camouflaged existence and sustain the continuity of new arrivals: ‘foggy’ social structures which form the connection between irregular migrants and the broader processes of informality that exist within any social fabric. Their book, they argued, had shed light on the processes that nurture places and sequences of social interaction in which irregular migrants may participate as an alternative to and protected from the system of institutional identities (2011: 225).

That emphasis in *Foggy Structures* on informality, on inclusion as a process that takes place despite not because of the state, highlights how recently we have come to see the juxtaposition of formal exclusion and *formal* inclusion, complementing the *informal* inclusion processes which that book explained so well. It is more apparent now that inclusive measures are not only the outcome of informal deviation from the rules but can intentionally be allowed *by* the rules, a process in which municipal activism has in recent years become more visible but to which national governments also contribute. In the years since 2011 we have also learnt more about the ways in which the structural conditions that foster irregularity are shaped by changing economic conditions and labour market reforms; seen incipient mobilisations of irregular migrants challenging their exclusion; the birth of a reception

industry in southern Europe; de-coupling in multi-level governance on this issue; and the incremental development of human rights standards for this vulnerable section of Europe's population.

There is much that remains to be understood. Many of the chapters in the book identify questions for a future research agenda, from the need for more empirical evidence on the relationship between irregular migration and irregular working in sectors of Europe's labour markets (and the relevance within that of factors such as gender, nationality and family status) to our need to position municipal activism within a clearer concept of the State. Do welfare restrictions and detention in fact serve to deter arrival and encourage return, and what is the actual impact of inclusive measures on social policy aims and on individual behaviour? Comparative studies, as Ataç and Schütze suggest, would help identify the role of national contexts, institutions, and political orientations on the effects of differing approaches. A stronger evidence base, as the Oxford symposium that led to this book concluded, would also help to counter the dominant narrative on 'illegal immigration' which is counterproductive for a constructive policy dialogue.²

A fundamental question, Spencer argues, would also then remain to be addressed: if a level of inclusion of irregular migrants is to be reflected in policy responses, what level of inclusion (not least through access to services) is appropriate? If irregular migrants are not to enjoy the same rights as citizens or other migrants, where should the line be drawn, and on what grounds (Bosniak 2006)? Should immigration status indeed be the determinant of entitlements to services, or alternative grounds such as level of need? Here the proportionality test emphasised by O'Cinneide is key: if restrictive measures are deemed necessary for a legitimate policy aim, immigration control, are they also a proportional response? Answering that question requires a richer body of evidence on the impact of exclusion on economic and social policy goals and on individuals themselves than migration scholars have yet produced; but the study of irregular migration is now an expanding and dynamic field of enquiry in Migration Studies. It is our hope that this book has both contributed to our collective understanding of this topic and will inspire others to prioritise irregular migration in their own research.

References

- Bommes, M., & Sciortino, G. (2011). In lieu of a conclusion: Steps towards a conceptual framework for the study of irregular migration (Chapter 10). In M. Bommes & G. Sciortino (Eds.), *Foggy social structures: Irregular migration, European labour markets and the welfare state*. Amsterdam: Amsterdam University Press.
- Bosniak, L. (2006). *The citizen and the alien: Dilemmas of contemporary membership*. Princeton: Princeton University Press.

² 'Strategic Approaches on Migrants with Irregular Status in Europe,' Autumn Academy 2017: What did we learn? <https://www.compas.ox.ac.uk/wp-content/uploads/AA17-What-did-we-learn.pdf>

- Castles, S. (2004). Why migration policies fail. *Ethnic and Racial Studies*, 27(2), 205–227.
- Chauvin, S., & Garcés-Mascareñas, B. (2012). Beyond informal citizenship: The new moral economy of migrant illegality. *International Political Sociology*, 6(3), 241–259. <https://doi.org/10.1111/j.1749-5687.2012.00162.x>.
- Genç, H. D. (2018). Responding to irregular migration: High potential of local governments in Turkey. *International Migration*, 56, 73–87. <https://doi.org/10.1111/imig.12424>.
- Lahav, G. (1998). Immigration and the state: The devolution and privatisation of immigration control in the EU. *Journal of Ethnic and Migration Studies*, 24(4), 675–694. <https://doi.org/10.1080/1369183X.1998.9976660>.
- Oomen, B., & Baumgärtel, M. (2018). Frontier cities: The rise of local authorities as an opportunity for international human rights law. *European Journal of International Law*, 29(2), 607–630.
- Schweitzer, R. (2018). Health care versus border care: Justification and hypocrisy in the multilevel negotiation of irregular migrants' access to fundamental rights and services. *Journal of Immigrant & Refugee Studies*, 17, 61–76. <https://doi.org/10.1080/15562948.2018.1489088>.
- Slaven, M., & Boswell, C. (2018). Why symbolise control? Irregular migration to the UK and symbolic policy-making in the 1960s. *Journal of Ethnic and Migration Studies*, 45, 1477–1495. <https://doi.org/10.1080/1369183X.2018.1459522>.
- Spencer, S. (2018). Multi-level governance of an intractable policy problem: Migrants with irregular status in Europe. *Journal of Ethnic and Migration Studies*, 44(12), 2034–2052. <https://doi.org/10.1080/1369183X.2017.1341708>.
- Spencer, S., & Hughes, V. (2015). Fundamental rights for irregular migrants: Legal entitlements to healthcare and school education across the EU28. *European Human Rights Law Review*, 6, 604–616.
- Triandafyllidou, A. (Ed.). (2010). *Irregular migration in Europe*. Aldershot: Ashgate.
- Triandafyllidou, A. (Ed.). (2013). *Irregular migrant domestic workers in Europe: Who cares?* Aldershot: Ashgate.

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