Expert knowledge and the global governance of migrant health: the case of the IOM

Expertise is ubiquitous in global governance. Domestic and international institutions turn to independent experts aiming to achieve a variety of outcomes – they may seek support with carrying out tasks more efficiently (Boswell 2008; Dunlop 2010; Haverland 2009; Haas 1992) and they may want to improve the quality, objectivity, and legitimacy of the decisions they reach (Blom 2021; Boswell 2008; Haas 1992; Haverland 2009; Nowotny 2000; Dunlop 2010; Hunter and Boswell 2015; Schrefler 2010; Niederberger 2020). International organisations have employed and worked in partnership with experts who are active different across areas of practice like health, climate, education, migration, or development (Timmermans and Berg 2003; Boswell 2009; Donovan 2010; Jatteau 2013; Sending 2017). Larger budgets dedicated to expert knowledge production have made it possible for international organisations like the WHO, OECD, or the World Bank, to become authoritative producers of research and of data for policy purposes (Freeman and Sturdy, 2017).

Academic expertise plays a particularly important role in more politicised areas of policymaking, like migration and health governance, where governments and international organisations have invested a lot of resources in research (Boswell 2009a; Littoz-Monnet, 2017; 2022). Experts are embedded in large transnational networks made up of different actors that specialise in specific areas of policymaking. The rapid proliferation of international institutions has given rise to concerns about institutional complexity and fragmentation (Beckfield 2008), with more institutional networks being divided along sectoral or regional lines (Greenhill and Lupu 2017), including both formal and informal models of collaboration (stone 2013). These networks can be informal in nature and often drive policy innovation and new initiatives. Made up of many types of actors, including different state and non-state actors, these networks play key roles in domains of governance that are fluid and undergo rapid change. They can provide important channels of influence for scholars and non-governmental organisations (NGOs) who can drive policy innovation, convene, and legitimate activities in international organisations, including at the United Nations (Biersteker 2017).

Despite existing scholarship having offered valuable insights on the uses of expertise in global governance, we still have much to learn about the specific roles that academic experts might play in large and increasingly complex trans-national policy networks. In recent decades, global governance structures have come under growing pressure to address complex global issues – like migration and health crises – by building partnerships with many different actors, ranging from specialised agencies of member states' national governments and nongovernmental organisations to private actors and independent experts. Current research demonstrates that expertise may be employed to serve two main types of goals. First, experts can serve instrumental purposes when they help institutions problem solve (Littoz-Monnet 2017; 2021). The second and third conditions of expert knowledge use are symbolic in nature and are tied on (1) the *mode of settlement* preferred by political actors when they need to choose between different policy options and to determine which claims about policy solutions are considered legitimate or authoritative (Boswell 2019) and on (2) the mode of legitimation used to signal that institutions have epistemic authority (Herbst 2003) and are competent and likely to make well-founded decisions (Boswell 2019).

I contribute to this scholarship contending that to better understand the role of expertise in global governance networks, it is important to also consider a fourth condition – the connectedness of experts inside complex trans-national policy network - where connectedness is defined in terms of the topological characteristics of experts inside global governance networks. Drawing on insights from network theory and network analysis, I argue that the expert's position (topology) in a network and the relationships the expert fosters with other actors outside the network determines the extent to which an international organisation might turn to them for expert knowledge. When it comes to connectedness, I propose that global governance institutions are more likely to turn to expert knowledge in three scenarios. First, when the experts that hold the relevant knowledge are very well connected to other actors in the network, international policy-makers will turn to them not only to expand their area of expertise (Linnoz-Monnet 2017; 2021) but also to expand their area of (usually normative) influence and as a consequence also expand their network. Second, international institutions tend to connect with academic experts and researchers when they are in their turn well-connected to other members of the same network. As I will discuss below, this is a characteristic of tightly connected networks, which are also called 'small worlds'. Third, when the content of the expert knowledge is of import to a larger number of actors inside or outside a network, the international institution will be more likely to use that expert knowledge to consolidate their own position in the network.

I illustrate this argument with a descriptive network analysis based on original data about the trans-national network specialised in the governance of migrant health that was created by the main global institution overseeing the migration governance, the International Organization for Migration. The rationale for the selection of this 'mixed' area of governance - migrant health - is twofold. In recent years international organisations have proliferated partnerships across specialised agencies and institutions as well as collaborations with other actors in response to complex current global crises that cover two or more domains of policymaking and practice. Moreover, we know that expert knowledge is particularly useful when a policy problem is *politically salient* and at the same time *publicly contested* (Boswell 2019). As such, migrant health is a mixed area of global policymaking and practice that involves two domains that are at the same time publicly contested and politically salient in many (arguably most) countries around the world. The below analysis offers original insights into the architecture of a mixed trans-national policy network in which academic experts hold a central position due to their connectedness being key to the consolidation of global networks as small worlds. Ultimately, this study aims to respond to Kim's call for much-needed 'conceptual clarity and more empirical analysis to advance our understanding of structural features of global governance (2020: 904).'

Expertise in global governance systems

Recent scholarship has showed that what is currently considered expert knowledge in global governance is made possible by a diversity of actors coming often from IOs, universities, think tanks, industry and philanthropic foundations, civil society, and the private sector – which form communities of practice (Bueger 2015), transnational communities (Djelic and Quack

2010; Stone 2017), clubs (Tsigou 2015), and professional networks (Cohen, Seabooke and Henriksen 2017; Nahrieder 2019; Seabrooke and Tsingou 2021). The use of expert knowledge isn't without its critics, as scholars have revealed the exclusive knowledge produced by these expert groups (Leander and Weaver 2018) and the 'elite' or 'cliquish' nature of such communities (Tsigou 2015; Niederberger 2018).

While expert knowledge can be used for instrumental purposes, specifically to problem-solve policy issues, scholarly expertise can also serve important symbolic functions. First, bureaucratic actors working in international organisations can turn to expert knowledge for instrumental purposes, with the primary goal to expand their sphere of competences to new issue domains (Littoz-Monnet 2017; 2021) and to problem-solve. In policy networks can be employed to show to the outside world that the public institution operates according to rational, evidence-based standards (Schrefler 2010) or that it aims to close accountability gaps (Lombradi and Moschella 2017). Importantly, they can lend legitimacy to the choices that decision-makers have already taken (Boswell 2008; Weible 2008; Herbst 2003; Hunter and Boswell 2015; Schrefler 2010).

Scholars have proposed four main models that explain scholars' engagement with and influence on international and domestic policymaking (Biersteker, 2017). One of the first models of influence is the 'trickle-down' model and does not involve the active participation or agency on the part of academics. The mechanism of knowledge transfer involves academics producing knowledge in 'ivory towers' from where their ideas filer down into the world of policy analysis and popular discourse (Walt, 2004). The second mechanism of influence proposes that academics can take time out of university office to periodically move in and out of policy positions. When they serve in the policy world, academics draw on their knowledge to contribute to the policy world's 'embedded intellectual capital' (Nye 2008). Think tanks offer a third model of knowledge to practitioners (Wilson, 2007). A fourth model proposes an indirect mechanism of influence – through teaching, academics educate students who go on to work in the policy world, drawing on their scholarly education to shape policymaking (Keynes 1936).

In addition to these four classic models, a fifth model of policy engagement is more informal in nature, relying on informal collaborations, arrangements, and institutions facilitating the exchange of ideas between scholars and policymakers (Stone 2013). Biersteker (2017) proposes that an appropriate concept to capture the formal and informal types of interactions between academics and the policy world is the concept of participation in transnational policy networks (Biersteker 2014, 2017). Reminiscent of Bourdieu's conceptualisation of a specialised field of expertise (1990), a transnational policy network is made up of 'a group of individuals who share a common expertise, a common technical language to communicate that expertise, broadly shared normative concerns, but not necessarily agreement on specific policy alternatives (Biersteker 2017).' These networks can be informal in nature and often drive policy innovation and new initiatives. Made up of many types of actors, including different state and non-state actors, these networks play key roles in domains of governance that are fluid and undergo rapid change. They can provide important channels of influence for scholars and non-governmental organisations (NGOs) who can drive policy innovation, convene, and legitimate activities in international organisations, including at the United Nations (Biersteker 2017).

Academics are active participants in TPNs and can influence policy practice through different activities (Biersteker 2014, 2017). For instance, in the context of the UN, they can

conduct policy-oriented research building databases and supplementing the knowledge of practitioners on a topic of their expertise. They can organise and conduct training workshops for the dissemination of research findings that might be of interest for practitioners, exploring new ideas or stimulating alternative scenarios. Scholars can also co-direct and draft manuals, participating in all stages of the manual's development and can also perform important convening functions that can set new research agendas or tackle points that are too sensitive for government or inter-governmental sponsorship. Academics can conduct briefings to adjust the terms of debate in public or policy settings and to disseminate findings. Finally, scholars can write independent reports on emerging issues of relevance for policymaking, integrating knowledge from different disciplines (Biersteker 2014, 2017). Given that scholars have the authority of expertise and are accountable to a larger community of peers, they have more independence to legitimise and to criticise (Biersteker 2017).

Expertise in immigration and health governance

Additionally, scholars have theorised the use of academic research expertise in politicised areas of governance, like immigration and health, for both instrumental and symbolic purposes. In addition to instrumental uses of research for problem-solving goals (Littoz-Monnet (2017; 2021), expert knowledge can serve symbolic roles such as a substantiating function, lending credibility to particular claims or preferences (Boswell 2009a; 2019). Officials and politicians might be keen to refer to certain research findings as a form of 'ammunition' to bolster their arguments (Weiss 1979). Additionally, expert knowledge might serve a 'legitimising' function, offering a signal to the world that institution or policymakers could mobilise and deploy research findings with epistemic authority (Herbst 2003), indicating that they are competent and likely to make well-founded decisions (Boswell 2019). Surprisingly, given large research budgets, immigration politics and policymaking have been described as 'far from evidence-based' (Florence et al. 2005; Boswell 2009a; Caponio et al. 2010; Jørgensen 2011; Scholten et al. 2016) and more informed by simplistic or even assumptions about migration dynamics.

Experts are playing key roles also in the realm of global health governance, which, like migration, can be a politicised policy domain. For instance, in the case of mental health governance, scholars have found that mechanisms of circularity and exclusivity create and maintain a nucleus of organisations that are closely connected and mutually reliant (Littoz-Monnet 2022). These dynamics of circularity and exclusivity between a select number of research clusters at the intersection of policy and academia that have WHO and the medical journal The Lancet at their centre. This exclusive circle of experts perpetuate a certain kind of expertise grounded in biomedical explanations of mental health disorders that encourage standard treatments or solutions to be applied throughout the world (Edquist 2008). However, the evidence behind biological explanations of mental health conditions has been questioned within psychiatry itself for decades (McGoey 2010; Moncrieff 2010) and has been countered by alternative approaches that highlight environmental and contextual factors (Kirmayer 2012). The complicitous participation of private industries in the proliferation of psychotropic medication use has also been the object of criticism (Mills and Fernando 2014; Lehmann 2019). Despite criticism, biological evidence, diagnostic standards, and access to medicine continue to be at the heart of WHO's recommendations (Littoz-Monnet 2022).

The Political Uses of Expert Knowledge

Expert knowledge is particularly useful when a policy problem is *politically salient* and at the same time *publicly contested*. When an issue is politically salient, it attracts a lot public attention and is usually an issue of importance to voters. At the same time, the same policy issue could become the object of political contestation, leading to the existence of conflict over the nature of the policy problems or about the appropriate measures the state could take to address these problems. Immigration policy is often such a salient and contested topic in many national contexts (Scholten et al. 2016; Boswell 2019). As the COVID-19 pandemic has taught us, health governance can also become salient and hotly contested, although we expect that, relative to other areas of policy, on health policy would be more easily solved by drawing on expert knowledge. To solve this tension between salience and contestation, politicians and other participants in political debate often turn to expert knowledge, to support contested claims and support their pre-given preferences (Boswell 2019). Quantitative data is often preferred, as it conveys precision, rigour, and objectivity (Espeland and Stevens 2008).

The first condition for the use of expert knowledge by international organisations is instrumental, seeking to expand institutional and network spheres of competences to new issue domains (Littoz-Monnet 2017; 2021), to problem-solve, and to improve the efficiency and effectiveness of decision making. Boswell (2019: 23) proposes that a second condition for the use of expert knowledge is the mode of settlement preferred by political actors when they need to choose between different policy options and to determine which claims about policy solutions are considered legitimate or authoritative. Democratic modes of settlement put the decision in the hands of voters, deferring to their interests of preferences. Normative debates about identity, diversity, multiculturalism, justice, shared values are often settled through consultations with the electorate. A second mode of settlement is 'technocratic' in nature and turns to expert opinions to settle contestation of policy options. This approach is more common when the nature of the policy problems requires solutions that are complex and technical, like settling debates about the importance of reducing unemployment or improving health care. In the realm of migration governance, technocratic modes of settlement are more frequent in the domain of labour migration policy (Boswell 2019). In general, expert knowledge isn't sufficient to resolve technocratic settlements. Rather, political, or economic interests and value judgments shape the final outcomes of highly politicised debates.

A third condition for the use of expertise in organisations is *the mode of legitimation*, linked to the mechanisms public administrators use in domestic ministries or international institutions to secure legitimacy from their environments (March and Olsen 1983; DiMaggio and Powell 1991). In the sectors where policy effectiveness and impact have tangible effects in the real world, organisations will use modes of legitimation that are based on demonstrating tangible outputs and outcomes. For instance, the numbers of asylum seekers or the uptake a certain vaccine would be policy outcomes for which incumbents would gain voters' recognition (Boswell 2019). In policy areas where the effects of institutional work are much more diffuse and can't be as easily measured or linked to a particular policy (Boswell 2012), institutions and public actors turn to rhetoric and a symbolic mode of legitimation, to symbolic actions to derive support for their preferences and their work (Scott and Meyer 1991, Brunsson 2002). Domains in which such symbolic legitimation is common are policies on immigrant integration and diversity, or on irregular migration (Boswell 2019). To legitimise

action, policy-makers draw on expert knowledge even if the amendments that they make to policy outputs are symbolic and minimal. In other words, policy-makers mention expert knowledge only to signal that they are taking sound and well-grounded decisions but minimally (if at all) modifying the policy outcomes at rhetoric or cosmetic level Boswell 2009; 2019).

I contend that, to fully understand the conditions of expertise uptake in policy-making, it is important to consider another dimension that is particularly relevant for global governance – the connectedness of expertise in a network of relevant actors in politicised domains of policy action. When we study academic experts and researchers as actors in an international policy network (Biersteker 2017; 2019) – be that network a community, a group, or a club – each actor's position in the network and the ties they build with other actors in the network grant them topological relevance. Drawing on insights from network theory and analysis, each experts's position or topology in a network and the relationships it fosters with other actors inside the network determines the extent to which an international organisation might turn to them for expert knowledge. When it comes to connectedness, global governance institutions are more likely to turn to expert knowledge in two scenarios. First, when the experts that hold the relevant knowledge are very well connected to other actors in the network, international policy-makers will turn to them not only to expand their area of expertise (Linnoz-Monnet 2017; 2021) but also to expand their area of (usually normative) influence and as a consequence also expand their network. This is also true if the network doesn't expand by including new members. As the analysis results will show in the next section, international institutions tend to connect with academic experts and researchers when they are in their turn well-connected to other members of the same network. As I will discuss below, this is a characteristic of tightly connected networks, which are also called 'small worlds'. Second, when the content of the expert knowledge is of import to a larger number of actors inside or outside of a network, the international institution will be more likely to use that expert knowledge to consolidate their own position in the network.

I propose that network analysis can offer a valuable theoretical and analytical lens to visually map and begin to analyse the complexity of the global governance architecture. Thus far in the realm of global governance, the network approach has been used to study sizable groups of international regimes (Morin et al 2017), multilateral agreements (Kim 2013), and intergovernmental organisations (Kim 2013). I further argue that network analysis is particularly useful to capture a more novel type of global governance complexity – 'mixed' areas of policy work and practice that combine more than one area of expertise such as the area of activity at the centre of this study – migrant health. Such mixed policy domains involve large numbers of actors and institutions that develop new types of cross-institutional relationships. Despite lack of agreement amongst scholars regarding a unitary analytical framework for network analysis or on the most useful forms of operationalisation for different characteristics of global governance structures, network analysis provides a valuable methodological toolkit for measuring different topological properties of large-scale networks in global governance (Kim 2020).

Global governance networks, complexity, and 'small worlds'

Networks in global governance

Global governance networks (Eilstrup-Sangionavvi 2017) are made up of international institutions and actors. Existing global governance research has looked at networks made up primarily of actors in which institutions serve as links through which actors interact, such as networks of states or cities that are institutionally connected through bilateral or multilateral agreements (e.g., Goyal and Joshi 2006; Saban, Bonomo, and Stier-Moses 2010; Oatley et al. 2013; Cranmer, Heinrich, and Desmarais 2014; Maoz 2011; Kinne 2013b; Milewicz et al. 2017; Sopranzetti 2018; Lee 2019). The growing interest in regime complexes and governance architecture has moved the focus of global governance research onto networks of institutions (Burch et al 2019) such as research on international agreements and organisations that are linked through references or overlap in membership (Kim 2013, Greenhill and Lupu 2017; Perez, Cohen, and Schreiber 2018). Varied types of institutions – shared membership, references, partnerships, or other forms of institutional interlinkage – can enhance interstate cooperation amongst members (Kimme 2013a, b, 2018; Lupu and Greenhill 2017) and can increase cohesiveness and integration in the network of states (Kim 2020).

The network approach to the study of global governance has brought to light some degree of order in the underlying structure of global governance systems, most commonly through the formulation of a few key agreements that transformed the network structure into small worlds (Kim 2013; 2020). These forms of network self-governance can vary depending on the domain of governance, but existing research has proposed three main characteristics of network fragmentation (Biremann et al 2009), polycentricity (Jordan et al 2018), and complexity (Orsini at al 2019). Fragmentation is concerned with connectivity versus dysconnectivity, or patterns of cooperation versus competition, while polycentricity in a network is a logic of mutual adjustment amongst clusters of actors inside a network in the absence of a central node with network-wide authority (Kim 2020). Complexity is a principle linked to the emergence of self-organisation among parts in large networks, distinguishing self-organised networks from complicated networks that follow no structural logic. Over the years, network analysis in the realm of global governance has suffered from a lack of agreement on conceptual definitions and operationalisation and from the absence of a common analytical lens or framework (Kim 2020).

The topology of a *real-world networks* is different from that of a random network (Albert and Barabási 2002, Newman 2003). Complex networks are very large non-random structures that are organised according to some inherent logic of 'organised complexity' (Weaver 1948; Hidalgo 2016). Despite very large size, complex networks have some degree of order and are organised in two types of structural forms – small-world and scale-free. *Small-world* networks present with a high degree of local clustering and a low average path length, making it possible for any two nodes/actors in the network to be only a few steps apart (Watts 2004). *Scale-free* networks contain 'hubs', or nodes that have many more connections than most other nodes (Barabási 2009). Small-world and scale-free network's adaptiveness, robustness, and vulnerability (Albert et al. 2000). In the context of global governance, scholars interested in the effectiveness of international institutions and regimes have acknowledged the relevance of these structural characteristics in large global networks of institutions (Young

et al. 2006). A network approach to identifying the emergence of institutional complexity and the order underlying it would then entail identifying these topological features commonly found in many complex networks (Kim 2020), as has been shown to be the case in the system of multilateral environmental agreements (Kim 2013). Although small-world and scale-free topologies are not perfect proxies for complexity (Albert and Barabási 2002), they are valuable network-based indicators that can tell us whether a system of institutions is complex of just complicated (Kim 2020).

The connectedness of expert knowledge and network complexity

As introduced earlier, I argue that connectedness is a characteristic of academic expertise on global governance when experts are embedded in transnational policy networks. I draw on insights from network analysis and conceptualise connectedness as topological in nature. Connectedness is defined in terms of the location of academic expertise in transnational networks made up of large numbers of specialised actors and institutions.

I propose below a framework for theorising the roles that academic experts might play in trans-national policy networks and for articulating the conditions under which international organisations might include academic experts depending on their connectedness (Table 1). Regardless of policy domain, international organisations will prioritise the inclusion in their network of academic experts with high connectedness, whether they seek to add to their networks new actors and ties to which the experts might be connected or they prioritise the academic experts that are already in their networks and that have a high degree of connectedness. Moreover, I propose that international organisations have both individual and network-level goals they aim to achieve, the former being linked to institutional consolidation inside the network and its normative influence inside and outside the specialised network and the latter being associated with the international organisation's interest to consolidate (and enhance network-level connectedness) the 'small world' nature of its network and to expand its expertise outside of the specialised network it facilitates (Table 1).

In network analysis terms, connectedness can be operationalised using network metrics at different levels of analysis. Of particular importance for an analysis at the level of nodes and links are measures of centrality, such as degree centrality and betweenness centrality. Based on these measures, nodes with more connections (higher centrality) or nodes through which most other nodes need to pass to get to other nodes in the network (bottleneck positions created by higher betweenness centrality) are considered central and play a more important role in the system (Borgatti 2005). For experts to play central roles in networks, they would be expected to be one of the nodes with the highest degree centrality or betweenness centrality in the network.

Inside network		Inside network	Outside network
vation	Network-level goals	Consolidate 'small world'	Expand IO expertise
IO motivation	Institutional-level goals	Consolidate IO's own position inside network	Expand IO normative influence

Table 1: IO motivation for expert inclusion intrans-national policy networks

At the level of system, connectedness can be understood with the help of measures of complexity that are significant for understanding the architecture of global governance systems and, by extension, also the roles that experts could play in these networks. For a network to be a small world, it should have a high degree of local clustering and a low average path length, with any two nodes in the network being only a few steps apart (Watts 2004). In other words, in small-world networks nodes are all not all direct neighbours to all other nodes but they are only a few steps apart from other nodes. This would indicate that actors in a small world are linked to others by a short chain of connecting nodes (measured through the mean-shortest path). Moreover, small worlds tend to contain cliques or sub-cliques, which are sub-networks where most two nodes are connected with each other (this is measured through a high clustering coefficient). An additional characteristic of a small world is whether a network might be scale-free, which is determined by whether the network has hubs that have more connections than most other nodes (Barabási 2009). These hubs are high degree nodes that serve as the common connections between other edges.

The structural characteristics of small worlds have broader implications for the makeup and efficiency of the networks. Depending on the goals of the networks and of the actors making them up, these characteristics can be advantageous or detrimental. Small worlds are more resistant to change due to the filtering system of only accepting into the network nodes that are highly connected. In the context of global governance, resistance to change might be beneficial when smaller communities seek to effect change outside of their network, promoting strong links amongst a small number of network actors and more coordinated action. Examples of such small worlds for which resistance to change is a positive feature that makes them more effective are activist groups or thematic and policy lobbies. At the same time, resistance to change might not be desirable in a network linked to an international organisation, for instance, especially as international institutions might come under pressure to transform themselves in response to political and policy changes in the global environment.

A second implication of the structural features of small-world networks is that they are very effective in relaying information while keeping the number of links required to connect a network to a minimum. Consequently, in a small world, the larger the social network, the more valuable the nodes of high connectivity within the network (Shirky C 2008). Here Comes Everybody: the power of organizing without organizations. Penguin Press. ISBN 978-1-59420-153-0. OCLC 168716646). These hubs are very important in facilitating and coordinating the dissemination of information across different groups inside the network. As I will show in the below analysis, the connectedness of academic experts and researchers understood in terms of their position inside networks and the types and density of their ties with other actors inside the network is essential for establishing the network that the IOM creates to tackle challenges of migrant health.

IOM, migration governance, and migrant health

I focus on the IOM and on the networks it forms to tackle problems around migrant health. The rationale for selecting these institutions and this domain of policy and practice is threefold: the IOM is the main international institution mandated with the governance of all aspects of policy and practice related to global migration. The focus on migrant health reflects the increasingly cross-disciplinary nature of global governance work in global governance institutions and aims to better understand the implications for governance of expertise being used in an increasingly complex global governance environment.

The IOM was founded in 1951, as the Provisional Committee for the Movement of Migrants from Europe assisting European governments with transport services to help resettle millions of refugees to other countries. In 1989, the international organisation was re-named the International Organization for Migration and in 2016 it was officially integrated in the United Nations system of agencies. In an effort to protect migrants, states adopted the UN Global Compact on Safe, Orderly, and Regular Migration in 2018. The Compact aims to offer a shared vision of global migration balancing the states' interest in ensuring border security with the protection of migrants and the maximisation of development gains from migration. Importantly, the Global Compact fills a longstanding institutional gap through the appointment of the IOM as lead agency for the UN Network on Migration (Chuang 2022).

The IOM's appointment as the UN's designated migration agency was not without its critics, questioning the IOM's suitability for the task of global coordination. More generally, the IOM has acquired a reputation for being a jack of all trades, a bureaucratic entrepreneur that has worked as an 'instrument of Norther foreign policy Bradley 2017).' Without a doubt, the IOM has offered undeniably vital humanitarian assistance to vulnerable populations around the world, especially with respect to the protection of trafficked individuals (Migration Data Portal, Human Trafficking, 2023). At the same time, its partnerships with nation states assisting them to detain and repatriate asylum-seeker while increasing cross-border labour mobility have raised significant red flags over the IOM's questionable 'fidelity to the UN's human rights standards' (Guild et al 2020) and 'shady' practices of migration management (Ashutosh and Mountz (2011). Hence, the risk that the IOM's elevation to the role of UN's leading migration agency under the Global Compact on Migration will enable the institution to project the appearance of humanitarianism but essentially contribute to the erosion of

migrants' rights (Asher Lazerus Hirsch and Doig 2018). In 2016, when the IOM joined the UN system, its member states insisted that the international institution maintained the status of 'related organisation', hence maintaining operational independence and 'non-normative' status (GA Res 70/296, 2016). This implies, however, that the IOM is not subjected to the UN oversight mechanisms and that it is not required to make migrants' rights a priority in its mandate, unlike other UN agencies that also work in migration governance, like the UN High Commissioner for Refugees or the International Labor Organization. (Chueng 2020).

Despite its omnipresence in global migration governance, particularly through the work of nearly 500 field offices around the world, little is known about the work of the IOM. Valuable sources of information about the knowledge production capacity of the IOM as well as on the institutional mandate, internal changes, and approaches to specific migration issues are the institution's own publications (Ducasse-Rogier 2002) and its own staff members (Ionesco and Chazalniel 2015; Perruchoud 1989, 1992; Poteaux 2011). Some scholars have drawn attention to the lack of scholarly engagement with the IOM over the years (Elie 2010; Bradley 2017; Klabbers 2019), particularly from an international relations perspective that examines the interactions between the IOM, its member states, and the main donor states (Geiger & Koch 2018; Pécoud 2018).

Despite being one of the world's largest and most active institutions of global governance, very few scholars have made the study of the IOM a research topic in its own right (Pécoud 2018) and even fewer of these studies have taken a critical view of the international institution. A potential explanation for this lack of information is that the IOM has traditionally suffered from a lack of transparency, from informality and a decentralised structure, which has made it difficult to access information on its activities (Pécoud 2018). Additionally, the lack of scholarly attention might be historically explained by the lack of institutional stability and the real struggle to survive that the IOM experienced during the first 40 years of its existence before it became a perennial institution in 1989. This fuelled the public view that the IOM is a marginal actor, merely serving as a 'travel agency' for migrants (Ellie 2010) rather than engaging in ambitious normative objectives like other UN agencies (Pécoud 2018). A few studies have considered the IOM a key actor contributing to the governing global capitalism (Georgi 2010; Georgi and Schatral 2012) and the functioning of the 'neoliberal state' (Dupeyron 2016), reshaping the exercise of state power and the control of migration (Andrijasevic and Walters 2010), and contributing to the redefinition of state sovereignty in an era of economic globalisation (Ashutosh and Mountz (2011).

Although relatively few academics have researched the international institution in their own work, the engagement of the IOM with academic expertise is extensive in practice. Most scholars and researchers interested in migration have come across the IOM in different capacities, whether working with the institution early in their careers or as consultants, collaborating with the IOM for field research and interviews with its country office staff (Pécoud 2018). Some scholarly voices have explained the lack of critical studies on the IOM as a potential bias in the critical examination of the IOM due to the international institution having cultivated closed ties with leading migration scholars whom it pays for consultative work (Geiger and Pécoud, 2010).

A special issue in the *Journal of Ethnic and Migration Studies* from 2018 engages in more depth with some of the work that the IOM carried out in different domestic contexts. The study that's directly relevant for the topic in this paper is Korneev's piece on IOM's involvement in institutional partnerships with other international organisations like the World Bank, UN Women, the International Labour Organization, UNDP, UNODC and OSCE in the

realm of knowledge production. Despite being competing global bureaucracies (Barnett and Finnemore 2004), the IOM engages other international organisations in collaborative work to generate both predictive and normative migration-related knowledge (Korneev, 2018). The research finds that IOs' use of migration experts on Central Asia serves self-legitimation purposes leading to the formulation of a 'one size fits all' approach to regional work that disregards country-specific characteristics (Korneev 2018).

This special issue also proposes that the IOM, like all other international organisations, exerts power by constructing the social world (Bernett and Finnemore 1999, 700) through data production, by normatively documenting the world's problems and by making policy recommendations to address these problems (Pecoud 2018 What do we know about). Arguably the most influential knowledge-based agenda the IOM's has constructed has been the concept of 'migration management' and its practical implementation. IOM's current mandate covers four broad areas of migration management – migration facilitation, migration, and development, addressing forced migration, and migration regulation. In recent years the IOM also developed cross-cutting activities like migrant health, gender and migration, the promotion of international migration law, protecting migrants' rights, and policy debate and guidance (citation). Through the framework of the Global Compact for Migration, the IOM engages with three political agendas: (1) states' security concerns, specifically the control over their own borders; (2) economic migration and its implications for domestic labour markets; and (3) migrant protection through humanitarian intervention and development work (Pecoud 2018). These areas of work facilitate IOM's interaction with a wide range of actors like national governments, private actors, UN agencies, non-governmental organisations, media, and researchers. In this context, IOM can be viewed as a 'hub' for discussions and policy debates on migration, constantly integrating new players into its networks as partners, consultants, experts, and interlocutors. Ultimately, the IOM was found to make use of its network of partners in Sub-Saharan Africa to encourage a uniformization of migration governance policies and a move away from humanitarian responses in favour of mobility management and surveillance (Brachet 2016; Pecoud 2018).

In the realm of migration health, the IOM has a dedicated Migration Health Division that seeks to 'bridge the needs of both migrants and IOM member states, in close collaboration with partners, contributes toward the physical, mental and social well-being of migrants, enabling them and host communities to achieve social and economic development (https://www.iom.int/migration-health).' To develop migration health as an area expertise, the IOM has enlarged its network of specialised partners, including other institutions and experts. These institutional changes represent efforts by the UN agency to diversify their work and make it more relevant responding to increasingly complex social problems and ultimately more impactful on the ground. As the below analysis will show, the institutional network IOM developed includes expert knowledge in crucial roles for the conduct of the policy and practice activities.

Method and data

To examine the structures of global governance coordinated by the IOM and the roles that experts hold, I propose a network analysis of the institutional networks the IOM has created to respond to migrant health challenges. Network analysis has been found to be a particularly well-suited method of analysis in the context of global governance (read more on this

scholarship in Kim 2020). Data on actors collaborating with the IOM was collected through the examination of institutional documentation on the topic of migrant health that the international institution has made available on its website. Sources used span different types of documents, including annual reports, specialised reports, news reports, public updates, and minutes on meetings. A total of 71 sources were identified as related to the topic of migrant health and were included in the dataset. The year of the first publicly available source is 2016 and the cut-off year for data collection is 2022. It is possible that the IOM might have carried out work on issues at the intersection of migration and health governance before it has been documented in publicly available institutional sources that are included in this study. Even if possibly not exhaustive, the large number of sources included in study offer as good an image of expertise use and collaborative work as possible for the international organisation.

Relevant actors were identified through a combination of recognition and the direct institutional links techniques (Green 2013, 2017; Perez et al 2018) whenever institutions or relevant actors were mentioned together in a relevant institutional document. The collected information is coded in a two-step process, first to identify relevant relationships between institutions in each network and in the second instance to prepare for network analysis in the software Gephi, which I used for data visualisation and descriptive statistical analysis of the network's main structural characteristics.

The connectedness of academic expertise in migrant health governance

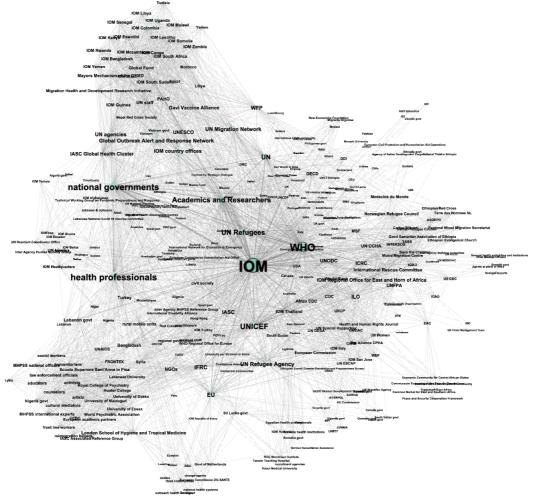
IOM's global migrant health network as a 'small world'

In network analytical terms, the migrant health network is characterised by complexity – It is a large scale-free network with many actors (367 nodes) and a small number of ties linking these actors (4335 undirected edges). As a result, the network density is low (0.065; see Table 2). Unlike high-density networks that are more closed to innovation and new information entering the network, A low-density network offers gaps in ties, or structural holes in the network, offering opportunities to access new resources and new knowledge when these gaps are bridged by new ties (Hansen, 1999; Dombrow and Higgins, 2005; and Prell, 2008). In broad strokes, the structure of IOM's migrant health network facilitates the introduction of new information and knowledge. In the context of our study, this signals a structural openness of the network to welcome new actors, such as academic experts that could fill informational gaps. These actors included in the network to add new information hold the potential of becoming important liaisons connecting two otherwise disconnected parts of the network (Kilduff and Tsai, 2003) or adding new actors (and networks of actors) to the existing one. In this sense, an actor that can connect loose ties to other networks and or can bridge a gap in a network can play an important role of brokers and can have high social capital.

|--|

Network measures	IOM
Network density	0.065
Average path length	1.955
Average degree	23.624
Average clustering coefficient	0.823
Total Triangles	35110
Nodes	367
(Undirected) Edges	4335

Figure 1: IOM Network (sorted by degree)



Exploratory network analysis shows that the trans-national network facilitated by the IOM for the governance of migrant health has characteristics specific to a small world (Tables 2 and 3; Figures 1 and 2): (1) it has a high degree of clustering; (2) it has a short average path length; and (3) a few of the actors in the network work as 'hubs.' Being a scale-free network, the clustering coefficient distribution decreases as the node degree increases, following a

power law. In other words, the low-degree nodes form very sense clusters or communities, and these clusters are connected to other clusters through nodes with high connectnedness, which form many ties with other actors in the network.

The actors that are part of the IOM's migrant health network are clustered in many smaller networks based on shared areas of work. For instance, the larger cluster in the lower left part of the network (Figure 1) is made up of several actors whose areas of work consist of research and of working with migrants directly. The cluster is made up of many universities around the world, cultural institutions and artists, and some professionals like social workers, educators, and law enforcement officials who participate in migrant healthcare. This cluster appears to have some stronger links to the European Union and to NGOs, who are nodes that connect the cluster to other parts of the larger network. Another example of a larger cluster is at the top left of the network (Figure 1). Amongst others, the cluster is made up of several IOM country offices, UN agencies, and some global policy initiatives like the Gavi Vaccine Alliance and the Migration Health and Development Research Alliance. The actors making up this cluster have stronger links with some particularly well-connected actors (with high degree centrality), like national governments, the UN more generally, as well as academics and researchers.

Another key characteristic of the IOM migration health network is a short average path length, with any two nodes in the network being (on average across the network) under two steps away (1.955; See Table 2). In theoretical terms relevant for this research, the average path length is relevant for understanding connectedness at the network level. The average shortest path length is a concept in network topology that is defined as the average number of steps along the shortest paths for all possible pairs of nodes (i.e. actors) in the network. This does not mean that all actors inside a network are exactly under two steps away from each other; rather, it is an average measure across the entire network. The shorter the average path length, the more efficiently information is expected to travel from one point in the network to another.

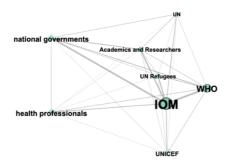
Thus far, the exploratory network analysis has offered valuable insights into the design of the IOM migrant health network, being is a complex but efficient network that is open to newcomers and to innovation. Once an actor enters the network, it is likely to be able to communicate quickly and efficiently with other actors. This indicates also that new expert knowledge is likely to easily spread across the network. A third characteristic of 'small worlds' is the existence of 'hubs', or nodes that have a number of links with other actors in the network that greatly exceeds the average of links for the whole network (e.g. high degree centrality). In the IOM's migrant health network, seven nodes out of 367 in the network have a very high number of links (over 100) and they could be considered hubs. Unsurprisingly given the nature of the domain – migrant health – the organisations with the highest number of links to other actors in the network are the IOM, the WHO, the UN more broadly, and the specialised UN agencies with migration mandates. In addition, health professionals and national governments are nodes with very high numbers of links, most likely due to their crucial role in the domestic implementation of any migrant health policy.

What is arguably more surprising is the very high degree centrality that the holders of academic expertise (i.e. 'academics and researchers' in the network) have in the network. In what follows I'll discuss the role of hubs in the network focusing on situating the connectedness of academic expertise as a hub.

Actor/node	Degree centrality	Betweenness centrality
IOM	354	33512
WHO	215	6581
Health professionals	174	3529
National governments	171	3854
UNICEF	138	1647
Academics and researchers	129	1612
UN Refugees	123	1308
UN	108	937

Table 3: Degree centrality for hubs in IOM migrant health network

Figure 2: Hubs in migrant health network (nodes with over 100 degrees)



Connectedness as network power – academic experts as 'hubs'

In a network where the most highly connected nodes are UN agencies and the main actors mandated with the implementation of migrant health policy, the high connectedness of academic experts appears surprising. Their degree centrality is 129, a value that is the sixth highest of the eight most connected nodes in the network and that is slightly higher than the degree centrality of UN Refugee, which is the UN agency specialising in refugee assistance (Figures 3 and 4). What makes their role so important in a large, specialised network co-ordinated by a specialised UN agency, like the IOM?

Linking back to the analytical framework (Table 1), the IOM's inclusion of academic experts in its migrant health network by both expansion and consolidation goals. Academic experts in the IOM's migrant health network are 'hubs' with high connectedness, having both high degree centrality and high between centrality. As such, they contribute to the overall

efficiency of the network, as they can facilitate both the introduction of new expert knowledge in the network and the rapid transmission of this knowledge across the network in which their connectenedness is very high. Whether the IOM invites expert knowledge for instrumental purposes or to legitimise action, the analysis has found that academics are the main providers of new and research-based knowledge in IOM's migrant health network. Moreover, academics bring with them a high number of their own ties with actors that are not already part of IOM's migrant health network. Introducing the new nodes into IOM's network expands the IO's ties for instrumental goals and offers opportunities to further its normative influence on more actors.

Academic experts contribute to the expansion of both IO's specialised knowledge on topics related to migrant health and to the expansion of its influence outside of the specialised network. As mentioned earlier, complex networks with low-density are generally more open to innovation and to the introduction of new knowledge and to the occurrence of hubs. Additionally, the impact of introducing well-connected academics in the network has a strong impact on the make-up and growth of the network – linking back to the theoretical framework, academics can play key roles in consolidating the ties that make up the 'small world' and, by extension, can help consolidate the IOM's own position inside the network. In other words, being a scale-free network that follows the structure of a small world, hubs have great influence on the topology of the IOM's migrant health network.

More specifically, scale-free networks (Barabási–Albert model) are different from random networks (Erdős–Rényi model) in two key aspects – growth and preferential attachment. A scale-free network like the one under investigation, assumes a continuous growth of the number of nodes compared to a random network that assumes a fixed number of nodes. In scale-free networks, the degree of the largest hub increases at much faster rates (i.e. polynomially) with the size of the network. As a result, the degree of a hub can be high and can continue to increase in a scale-free network (unlike a random network where the degree of the hubs remains small as the size of the network increases more slowly, at a logarithmic pace). In other words, the larger the IOM's migrant health network becomes, the more the connectedness of its hubs will increase. Hence, the introduction of academic experts in the network will lead to the consolidation of the other hubs' power or connectedness, principally the IOM's, and to an increase in the connectedness of the academics as hubs as well.

A second topological characteristic of scale-free networks is preferential attachment, which facilitates the connection of a new node to other nodes with higher degrees. In other words, when a new actor is introduced in the IOM's migrant health network, that node is much more likely to connect with one of the well-connected hubs than to another node with lower connectedness. By extension, the role of a hub like academic experts in the IOM network is not only to bring new information and new connections to the network but also to 'attract' more weakly connected nodes to form direct ties with hubs. Hence, the role of academic experts with high connectedness is to further consolidate the position and the power of the other actors with high connectedness, including the IOM itself.

The instrumental and normative advantages of having academic experts inside a specialised network are undeniable. At the same time, it is also important to consider less positive implications of connectedness in the context of network development. The existence of a few very well-connected hubs in the network makes it less likely for less well-connected actors to be included in networks. This is also true of less well-connected experts that might not be included in the network despite the unique and potentially valuable knowledge that

they could bring with them. The very well-connected actors in the network are more likely to select newcomers from other networks to bring them and, inevitably, these newcomers will further consolidate the existing power of the existing well-connected academic experts and other hubs in the network. This 'small world' effect entails that, despite being open to newcomers that can fill gaps in knowledge and can build new ties in the network, such networks can become limited to the needs dictated by the most well-connected hubs. In the case examined in this analysis, to preserve the innovative capacity of its network, the IOM would need to strike a fine balance between wanting to expand its power inside and outside its specialised network and creating pathways of welcoming less well-connected newcomers that could make valuable and innovative contributions to the network.

Figure 3: Ego Network for academics & researchers (sorted by degree)

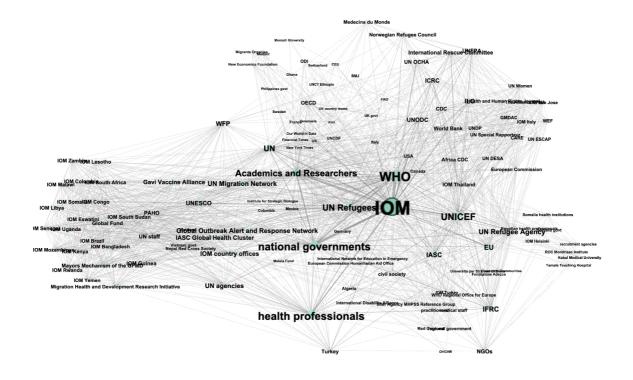
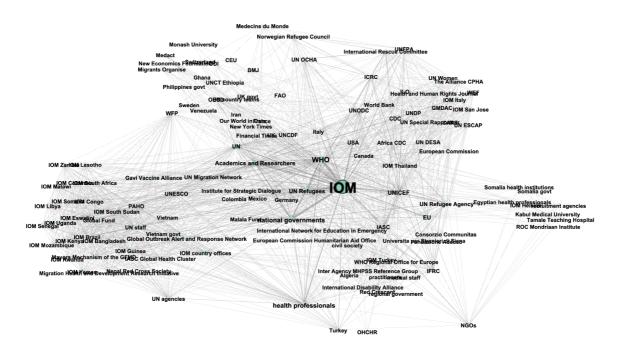


Figure 4: Ego network for academics (sorted by betweenness centrality)



Conclusion – to be added once I've figured out a bit better what I'm trying to say in this article.