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Migrants as sustainability actors: Contrasting nation, city and migrant discourses and actions

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ABSTRACT

Although it is widely recognized that migration is socially transformative, the potential contributions of migrants to transformations towards sustainability in their destination areas are often overlooked in mainstream discourse on environmentalism and sustainability. Here we seek to identify current narratives of migrants and sustainability across individual, urban, and national scales. Migrants are commonly framed in public policy as having no or even negative impacts on sustainability. The study hypotheses that the lived experience of sustainability by migrants within urban destinations differ from dominant discourses and perceptions of migrant populations within societies. We test and document such divergence using data from 21 interviews with key stakeholders from the city and Swedish national level, an attitudinal survey of 895 migrants and non-migrants in Malmö, Sweden; and a media analysis of local and national Swedish newspapers. Survey results show that migrants engage more extensively with a number of sustainability actions compared to non-migrants culminating in new insights on 'migrants as sustainability actors'. By contrasting individual scale practices against urban to national sustainability narratives, the study illuminates current barriers to and the potential of migrants to play a transformative role in progress towards sustainability that is unrecognized in dominant policy discourses. To tap into this potential, the study emphasizes that sustainability policy across scales should embrace plurality and migration as fundamental parts of progress towards sustainability.

1. The migration-sustainability nexus across scales

Migration constitutes an intrinsic part of broader processes of development and social change (De Haas, 2020) and has been suggested to have a potential to contribute to transformations towards sustainability (Adger et al., 2019). This positive view is based on evidence of the socially transformative outcomes of migration: migration promotes individual level opportunities for life transformation; it facilitates adaptation in origin areas (Black et al., 2011; Adger et al., 2020) and it links source and destination regions through return migration, remittances, and flows of knowledge, ideas, and innovation (Castles and Castles, 1998; De Haas, 2005; Greiner and Sakdapolrak, 2016). Earlier

more skeptical perspectives argue that migrants adopt resource-intensive lifestyles in high-income destination areas thus driving ecological unsustainability (Rees, 2006). Recent, more nuanced, perspectives emphasize that migration is a key element to achieving sustainable outcomes in destination areas through introducing new approaches to everyday practices of resource conservation (Head et al., 2021) and through influencing consumption behaviors and other socio-economic mechanisms underlying sustainability (Gavonel et al., 2021). Despite its significance, this perspective is largely disregarded in mainstream understandings of progress towards sustainability.

Sustainability, understood here within the frames of sustainable development, entails the vision of 'enhancing well-being in ways that

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more equitably meet the needs of present and future generations' (Clark and Harley, 2020). We posit that sustainability is determined by economic, social, and environmental factors that are intertwined and interact in complex ways (Clark and Harley, 2020). We assume that migration profoundly influence these factors and is thus a force for transformations (Adger et al., 2024), defined as fundamental shifts across individual, institutional, and structural spheres operating at multiple scales. In line with Scoones et al., (2020), we emphasise that transformations require societies to build on diverse knowledges, plural pathways, and recognise the political nature of sustainability and migration.

At the individual scale of action, studies show that migrants perform everyday sustainability practices in destination areas informed by a combination of pre-migration experiences, faith, cultural norms, embodied habits, preferences and values (MacGregor et al., 2019; Head et al., 2021; Abu et al., 2024). Practices established before migration, including proactive recycling and conservation activities, are predictors of current sustainability practices (Abu et al., 2024). Head et al. (2021) show that ethnic minority migrants maintain public transport use and water conservation practices in high-income countries with an Anglo-European majority. These findings bring new and valuable insights into how migrants interact with sustainability in the places they live.

These findings also address previous shortcomings of research on sustainability practices which has tended to employ Western-centric indicators assuming high levels of affluence and consumerism, such as the purchase of green products or electric cars (Head et al., 2021). Instead, a focus on inherent practices informed by diverse places and life histories builds on concepts of 'actually existing sustainabilities', seeking to illuminate actions that, while not explicitly linked to sustainable development goals, possess the capacity to fulfill them (Krueger and Agyeman, 2005). Such approaches yield better potential to capture migrants' everyday contributions, and plural pathways, to sustainability that may fall outside dominant discourses in destination areas.

Indeed, environmental sustainability policy tends to promote values, practices and norms of the culturally dominant group leading to the loss of culturally informed sustainability knowledge and practices of minority groups (Head, Klocker and Aguirre-Bielschowsky, 2019; Schell et al., 2020). As Arora-Jonsson and Ågren (2019) argues, failing to recognize differences invisibilize dominant discourses on culture and nature which privilege a form of "affective response underwritten by white, middle-class ... sensibilities as universal" (Arora-Jonsson and Ågren, 2019; 892). Actors also participate on unequal terms and environmental policy has excluded voices of immigrants, black, and indigenous communities from urban planning processes (Schell et al., 2020). Further, although sustainability policy calls for integrated approaches between the social, environmental, and economic, these are often treated as separate topics in urban governance. In Swedish sustainability policy, migration related issues often fall under social concerns whilst environmental concerns are centered around technical aspects (Arora-Jonsson, 2017a,b; Khan et al., 2020).

Hence the relationship between migration and societal transformations towards sustainability remains a disconnected narrative in policy and practice, hampering migrants' contributions to sustainability. For example, whilst the Sustainable Development Goals emphasize the contribution of migration to development in countries of origin through for example remittances, they fail to acknowledge the contributions of migrants to sustainable development in the receiving context (Adger et al., 2019). Migration is also missing from mainstream discourse on urban sustainability, degrowth and environmentalism, overlooking the critical role of inward migration on urban growth.

Despite shortcomings in urban sustainability policy, the urban space holds unique potential for transformative approaches of the migrationsustainability nexus. The position of cities in the global economy means that urban sustainability is challenged by for example increasing resource consumption yet benefited by being the main destination of migration flows and thus flows of ideas, knowledge and cultural practices (Findlay, 2011; Nyers and Rygiel, 2012; Turhan and Armiero, 2019) that can hold new solutions to those very challenges. There are hypotheses that the city that welcomes migrants is a "city of untapped potential and expanded human and social capital" (Amin, 2006:1016). The potential leadership of cities to tap into this is evidenced through The Mayors Migration Council, representing a group of progressive mayors of major cities globally, promoting their Agenda on Climate and Migration that includes aspirations to integrate migrant populations into planning and action for sustainability (MMC & C40 Cities, 2021).

Hence, the urban level is a site for potential transformations through migration. Although there is emerging evidence that migrants make important contributions to sustainability in their places of destination, there is to date no systematic mapping of dominant migrant-sustainability discourses and of how migrants are embedded within urban to national sustainability narratives in places.

Our study therefore seeks to contribute to an emerging field of research uncovering how migration interact with sustainability in urban destination areas (Adger et al., 2019; MacGregor et al., 2019; Gavonel et al., 2021; Head et al., 2021; Abu et al., 2024; Zickgraf et al., 2024). Our questions for our empirical analysis are: How do migrant and sustainability discourses overlap and conflict? What narratives and associated actions are developed and by whom? What does this mean for our understanding of migrant-sustainability relationships and for policy and practice? We apply urban political ecology to an empirical case study of Malmö to explore nature-society coproduction through technocratic policy and public narrative juxtaposed against local and individual migrant perspectives. We engage with politics of scale by examining the ways local scale expressions of sustainability are nested within policy and public discourses across nation and city scales. Thus, our contribution to urban political ecology comes through a cross-scale analysis addressing intersections in migrant-sustainability opportunities and paving the way for more transformative narratives of the migrant-sustainability nexus.

2. Political ecology of migration and sustainability

We apply urban political ecology alongside literature on sustainability and migration policy to engage with discourse and narratives across scales and identify overlaps and disconnects. The politics of scale, a central idea to urban political ecology (Swyngedouw and Heynen, 2003; Sayre, 2015), directs attention to convergences and divergences of multiple scales of action, discourse and decision-making, linking local to national processes (Adger et al., 2001). For example, through individual scale everyday practices, local actors may develop distinct alternatives to those promoted through policy-making institutions (Sayre, 2015; Loftus, 2012). Recent evidence from cities in the UK and Australia highlighting migrants' sustainability actions (MacGregor et al., 2019; Head et al., 2021) indicates that green policies are disconnected from local scale dynamics. There is thus reason to explore this further.

In Sweden, urban to national sustainability policy discourse is characterized by 'Swedish sustainability exceptionalism' where a 'Swedish' approach to sustainability is seen as superior (Lundqvist, 2000; Arora-Jonsson, 2017a). Bradley (2009) shows that Swedish urban policy holds an underpinning narrative of Swedish middle-class norms, involving processes of disciplining and transforming migrants into wellbehaving Swedes (Bradley, 2009). A similar exceptionalist approach is echoed in discourse on Swedish democracy, where immigrants are expected to be 'enlightened' by Swedes to become good citizens (Dahlstedt and Hertzberg, 2007; 186; Hübinette and Lundström, 2011). The widespread influence of ecological modernization in environmental policymaking, i.e. the idea of the environmental as an apolitical natural science issue, has further exacerbated notions of Swedish exceptionalism and sidelined diverse and local voices (Arora-Jonsson, 2017a). Dominant discourses may work to constrain spaces for political participation of diverse voices (Sayre, 2015) or promote discourse distanced from local realities (Adger et al., 2001). We apply those notions to better understand the embeddedness of migrants in sustainability discourse.

Thus, whilst 'technical' approaches to sustainability seem neutral and universal, they are deeply social, cultural, and political (Arora-Jonsson, 2017a; Nightingale et al., 2020). Neglecting this may perpetuate an environmentalism that overlooks perceptions other than that of the white middle class, as argued by environmental justice scholarship (Jones, 2002; Taylor, 2002; Agyeman et al., 2016). Building on this, political ecology scrutinizes notions that environmental sustainability is separate from urban processes (Heynen, 2014; Nightingale et al., 2020). Acknowledging that the urban is profoundly shaped by inward migrants, political ecology holds potential to propose new avenues to re-center migrants in sustainability discussions. We build on these perspectives to examine how diverse migrants interact with long established sustainability discourses – and make way for more plural, and transformative, ones.

Recognizing that higher scales may dictate processes at lower ones (Sayre, 2015), it is key to consider the influence of policy discourse on conditioning migrants' actions. National scale policy discourse on migration in Sweden is heavily dominated by anti-immigrant sentiments, justifying increasingly restrictive policies (Rydgren and Meiden, 2019; Dahlstedt and Neergaard, 2019) which arguably hinder migrants' participation in society (Franco-Gavonel et al., 2021). In addition, policy discourse on integration in Swedish society emphasise associational life as a platform for integration and inclusion (Fundberg, 2017). Yet, associations may perpetuate an 'assimilationist approach' to make migrants fit into the dominant society (Dahlström, 2004) as some immigrants experience a lack of democracy afforded to them by this form of organizing (Arora-Jonsson, 2017b).

Understanding migrant-sustainability relationships in policy and practice further requires attention towards urban to national scale interactions. The "local turn" in integration policies across Europe (Scholten and Penninx, 2020, p. 91) has resulted in new civil society-municipal relationships and policies grounded in the lived realities of migrants (Fry and Islar, 2021). Yet, overemphasizing the role of cities risks overlooking responses to migration and structural vulnerabilities at other scales (Turhan and Armiero, 2019). National-scale structural changes significantly shape sustainability experiences at the urban scale, such as where income changes drive socio-economic inequality manifested in urban residential segregation and social exclusion of migrants (Scarpa, 2015). Through applying the notion of scale (Sayre, 2015) we approach the transformative potential of migrants through the everyday individual scale (Loftus, 2012) and recognize it as nested within structural factors and discourses at other scales.

3. Material and methods

This study focuses on urban destinations for international migrants in a country with long established sustainability discourses to test ideas about convergence, divergence and lived experiences of sustainability. We deploy international migrant as an inclusive term covering various migration pathways, with the shared characteristic of having moved from their country of origin across an international border (inspired by IOM, 2023), in this case, to Sweden. The data were collected in the Malmö region in Sweden, which is perceived as one of the most dynamic migrant cities in Sweden and has well-established sustainability plans.

This study uses three sets of triangulated resources. First, 21 in-depth interviews were conducted with actors across scales, with differing mindsets and expertise, who work directly within migration or sustainability policy. Actors within sustainability policy belonged to social, economic, and environmental spheres (not necessarily separated, at times integrated or overlapping). Respondents at the national level were members of parliament (MPs) from all parties represented in the Swedish parliament but one, the Sweden Democrats, who declined invitations to interviews. At the local level, respondents ranged between elected municipal officials and bureaucrats working for various

departments of the local government of Malmö. Some respondents belonged to civil society organizations and the private sector and were sampled due to being involved in the governance of migration or sustainability in Malmö. Questions focused on links between the governance of sustainability and the governance of migration and possibilities for convergence. 'Sustainability' here was used in broad terms without imposing definitions, allowing policymakers' own perceptions to emerge. Questions are used to capture narratives on migrants and sustainability, and to document whether policies address the role of migrants in sustainability. In our analysis, we identified how migration emerged in discussions about issues framed, by actors, as linked to one or several of social, environmental, and economic dimensions, following our definition in section 1.

Secondly, recognizing that public discourse creates conditions that policymakers operate within (Hagelund, 2020), we conducted a media analysis of local and national newspapers using an online media archive. Using MediaArkivet, Scandinavia's largest print and online newspaper archive, the following keyword search terms were used: sustainability + migration, migrants, immigration, immigrants, integration, segregation. After checking for relevance, a larger number of articles were narrowed down to 46 articles that discussed migration with direct reference to sustainability over the period 2017 to 2022. Selected articles come from a mixture of well-established local, regional, and national newspapers. For local and regional newspapers, we focus specifically on those with coverage in and around Malmö. In keeping with other aspects of analysis, qualitative thematic analysis was carried out, with multiple researchers calibrating and verifying coding schemes to ensure interresearcher reliability (MacNamara, 2005).

Thirdly, a survey of Malmö residents identified as international migrants and non-migrants collected data on sustainability practices. We operationalize our definition of international migrants as foreign-born and non-migrants as Sweden-born, arguing that this captures those who for different reasons have moved from their country of origin to Sweden. We then compare responses between the two groups. This approach, of course, has limitations. We are not able to identify the ways that different migratory backgrounds, length of residence, or other social factors, influence sustainability experiences (O'Dell et al., 2023). Follow-up research would be necessary to explore these interesting aspects. Still, it allows us to explore sustainability narratives and associated actions emerging from international migrants and compare those to persistent narratives across scales in line with our research questions.

The survey was administered through civil society groups in Malmö and via Facebook with geographical and demographic targeting. The survey was open from December 2021 to June 2022. It was completed online and captured everyday experiences and actions in relation to life in the city, relationships with the urban environment, and perceptions of the neighborhood.

Questions used for the analysis are outlined in Table 1. The selection of questions was informed by literature on migrants' sustainability practices, highlighting the necessity of asking questions beyond those specific to certain affluent Western contexts (e.g. purchasing organic or FairTrade products) and instead explore practices that can be both intentional and unintentional (Krueger and Agyeman, 2005; Head et al., 2021). We also include questions on practices that emerged in policy and public narratives to test overlaps and disconnects, for example on household waste recycling. The questions correspond to the intertwined social, economic, and environmental factors that we believe determine sustainability as defined in section 1. Questions were on a Likert scale, from Strongly disagree to Strongly agree or Never to Always (see Table 1). To illuminate differences in practices between the groups, we included the 25th and the 75th percentile along with the median. It is worth noting that although the median is sometimes identical between the two groups, the 25th and 75th percentiles often differ. To assess whether differences were statistically significant we utilized Mann-Whitney U test generating Z scores and accompanying P values.

The study follows the guidelines and falls in line with the Swedish

Table 1Variables of interest.

	Correspon	Disagree Neither agree nor disagree Neither agree nor disagree Neither Agree Strongly Agree Rarely Sometimes Often Always Disagree Neither agree nor disagree Agree Strongly Agree					
Variable of interest	1	2	3	4	5		
Being concerned about a quickly changing natural environment	Strongly disagree	Disagree	agree nor	Agree			
Volunteering in an organization to protect the environment	Never	Rarely	Sometimes	Often	Always		
Feeling like an outsider	Strongly disagree	Disagree	agree nor	Agree			
Making efforts to reduce resources to protect the environment	Never	Rarely	Sometimes	Often	Always		
Making efforts to separate organic waste from the rest of everyday waste	Never	Rarely	Sometimes	Often	Always		
Volunteering in organization to protect people's rights	Never	Rarely	Sometimes	Often	Always		
Making efforts to save everyday water use	Never	Rarely	Sometimes	Often	Always		

Ethical Review standards in the Act Concerning Ethical Review of Research Involving Humans. The study does not involve processing of personal data, physical intervention, a method that risks harm to subjects physically or mentally, or concern studies on biological material taken. The survey was designed as part of the project migration, transformation, sustainability (MISTY) and received ethical approval from Maastricht University, Netherlands.

3.1. Survey sample characteristics

The country of origin of migrants is hugely diverse from all over the world, including a broad representation from across Europe as well

(Table 2). One could refer to Malmö as both cosmopolitan and internationally diverse as seen in the illustration in Fig. 1. Still, a large proportion of our survey respondents were born in Sweden (see Table 3). The true proportion of people born outside of Sweden living in Malmö is higher than the 15.8 percent in our study, constituting almost a third of Malmö's residents (Malmö Stad, 2023). This is possibly due to language barriers, as the survey was available in a limited number of languages.

4. Results and discussion

Our results and discussion are presented in three main parts seeking to answer the conceptual framing and questions set out:

- How do migrant and sustainability discourses overlap and conflict?
- What narratives and associated actions are developed and by whom?
- What does this mean for our understanding of migrant-sustainability relationships and for policy and practice?

4.1. Top-down discourses

Here we discuss findings from the interviews and media analysis. In asking ourselves 'How do migrant and sustainability discourses overlap and conflict?' and 'What narratives are developed and by whom?', we find that migration overlaps with sustainability discourses in fragmented ways, through three top-down discourses. One builds on narratives that positions migrants within social sustainability challenges, one separates migrants from environmental policy, and one imposes assimilationist notions of making migrants adopt sustainability behavior.

4.1.1. Migrants and social (un)sustainability

We observe a general perception among policymakers that migration governance is connected to social sustainability, which in turn is seen as separate from other dimensions:

"I'm thinking that when we talk about social sustainability, they [newcomers] are the ones affected the most." (Private sector, Urban Planning, Malmö)

"Newcomers in Sweden are affected in the way that they tend to end up in the same areas where there's already a lot of immigrants. There's overcrowding, lower quality of housing, meaning that the

Table 2Country of origin of migrants and non-migrants surveyed in Malmö.

Country	N.	%	Country	N.	%	Country	N.	%	Country	N.	%
United States Minor Outlying Isla.	1	0.11	Chile	2	0.22	Ireland	3	0.34	Saint Barthélemy	1	0.11
Afghanistan	1	0.11	China	2	0.22	Italy	3	0.34	Serbia	3	0.34
Albania	2	0.22	Colombia	1	0.11	Kenya	1	0.11	Slovakia	1	0.11
Anguilla	1	0.11	Curaçao	1	0.11	Korea (the Democratic People's Republic.	1	0.11	Slovenia	1	0.11
Antarctica	1	0.11	Denmark	14	1.56	Lithuania	2	0.22	Somalia	1	0.11
Argentina	1	0.11	England	3	0.34	Macao	1	0.11	Spain	1	0.11
Australia	2	0.22	Eritrea	1	0.11	Mexico	1	0.11	Sweden	746	83.35
Austria	1	0.11	Faroe Islands (the)	1	0.11	Monaco	1	0.11	Switzerland	2	0.22
Belgium	2	0.22	Finland	7	0.78	Netherlands (the)	2	0.22	Syrian Arab Republic (the)	1	0.11
Benin	1	0.11	France	1	0.11	New Zealand	1	0.11	Turkey	2	0.22
Bermuda	1	0.11	Germany	13	1.45	Norway	5	0.56	Ukraine	1	0.11
Bosnia and Herzegovina	3	0.34	Greece	3	0.34	Palau	1	0.11	United Kingdom of Great Britain and N	5	0.56
Bouvet Island	1	0.11	Iceland	4	0.45	Palestine, State of	1	0.11	United States of America (the)	9	1.01
Brazil	3	0.34	Indonesia	3	0.34	Poland	7	0.78	Uruguay	2	0.22
Canada	3	0.34	Iran (Islamic Republic of)	2	0.22	Romania	1	0.11	Vietnam	1	0.11
			Iraq	2	0.22	Russian Federation (the)	2	0.22	Åland Islands Total	1 895	0.11 100



Created with Datawrapper

Fig. 1. World map of country of origin of Malmö residents.

Table 3Details of migrants and non-migrants surveyed in Malmö.

Variable	N.	%	
Country			
Born outside of Sweden	140	15.8	
Born inside of Sweden	746	84.2	
Total	886	100	
City Area of Residence			
Centre	377	45.37	
East	115	13.84	
North	74	8.9	
South	99	11.91	
West	158	19.01	
Prefer not to say	8	0.96	
Total	831	100	

children have fewer educational opportunities." (National Official, Sweden)

Similarly, in the media analysis narratives of sustainability and migrants overlap overwhelmingly in terms of social sustainability, with 27 references. The most common subtheme of social sustainability in the media is on integration and the challenges of Swedish migration policy since the 2015 refugee reception. Considering the numerous statements from Swedish politicians and media outlets on the 'overburdened system' following the 2015 refugee reception (Hagelund, 2020), these findings could be expected. For example, migrant critical voices in national newspapers portray migration as a threat to sustainability, giving need to their advocacy for more restrictive migration policies:

"We have repeatedly argued that a volume target can give immigration policy predictability and long-term sustainability, while respecting the individual's right to a review of the grounds for protection." (Aftonbladet, 2020)

"Major efforts are needed for them [migrants] now and in the future if we are to avoid an unsustainable post-pandemic integration and labor market situation." (Dagens Nyheter, 2020)

Integration is portrayed as the key stepping-stone to social sustainability in a Swedish society that accepts migrants. However, in media articles migrants and migration are also framed as sources of social challenges:

"In 2019, Sweden received three times as many applications as Denmark, Finland and Norway combined. This is unreasonable and unsustainable given Sweden's major integration failure. We must take strong measures to reverse the worrying trend we are seeing in Sweden's excluded areas, where one in three pupils leaves without upper secondary school qualifications." (Aftonbladet, 2020)

National media narratives echo the wider shift in the migration paradigm towards a more migrant-hostile discursive environment and a tightening of migration policy (Rydgren and Meiden, 2019), following the increasing influence of the Sweden Democrats in the Swedish political arena with resultant nativist and racist rhetoric (Dahlstedt and Neergaard, 2019). The absence of migrant voices in this context is notable (Schmauch and Nygren, 2020). Informed by notions of scale and literature on migration-sustainability (Sayre, 2015; Gavonel et al., 2021), migrant-hostile public discourses may constrain the transformative potential of migrants as they justify restrictive policy measures and thus limit space for migrants' participation.

At the same time, we note disjuncture between media and policy narratives and a distance from migrant-hostile narratives in interviews. This divide is possibly exacerbated because representatives of the Sweden Democrats, the most vocal promoters of migrant-hostile narratives, declined our invitations to interviews. At the local level, policymakers instead frame migration in terms of the social and economic opportunities of international labor migration and the contribution of immigration to building a strong welfare system:

"There are a lot of international businesses in Malmö (...) The gaming industry needs a foreign work force. A lot of people come to work for them. They are very important for Malmö. We cannot forget that perspective" (City Official, Malmö)

"They get an income and at the same time they pay taxes to our welfare system. In that way there are great benefits. There is a synergy effect. We welcome them, invest a few years, and they start paying tax and contribute to our welfare society." (City Official, Social Services, Malmö).

Conversely to the policy narrative, the media analysis uncovered little reference to the economic opportunity represented by migrants. Rather, the coverage tended to view migration as a challenge to the sustainability of Swedish economic policy, further emphasizing the challenge of adequate employment for migrants and the problems this poses to economic sustainability.

We also note that quotes from policy and media emphasising sustainability challenges of residential segregation bring an interesting dimension for how urban sustainability is framed. It suggests that immigration drives segregation further understood as unsustainable as it intensifies social exclusion and inequalities. Yet, research shows that

immigration has little to no influence on residential segregation and segregation on inequality. Instead, income inequality affects migrants and manifest as segregation (Scarpa, 2015), revealing the influence that national scale structural changes have on shaping lived experiences of urban unsustainability. Our findings display the absence in public and policy discourse of structural approaches, such as income redistribution, as solutions to urban challenges. Secondly, narratives of ethnically diverse areas as unsustainable overlooks the fact that high ethnic diversity may offer significant opportunities for migration-sustainability transformations. Arora-Jonsson and Larsson (2021) show how in rural settings in Sweden, migrants are isolated from co-ethnic communities and diaspora, missing crucial resources for socializing and navigating the system. We build on this to argue that migrant-dense urban areas can present opportunities for participation, through co-ethnic communities, that are not necessarily available in more homogenous areas of the city or in rural settings.

4.1.2. Migrants and technocratic environmentalism

In asking what narratives are developed and by whom we find that there is an absence of migration in public and policy narratives on environmentalism. Several actors in environmental policy-making who were contacted declined interviews on the basis that they were only familiar with either migration or sustainability but not the other. Further, environmental sustainability was only referred to in three articles on migration and rarely mentioned in relation to social and economic aspects. Policy makers who were interviewed at all levels of governance struggled to find connections between migrants and environmental policy, reinforcing the idea that migration constitutes a social issue which in turn is seen as separate from the environmental. Disconnects in urban policy become clear when discussing the city's 10-year environmental plan, in which there is uncertainty about how to incorporate issues of integration:

"We're doing these initiatives for the environment and the climate for the next 10 years and we've also added into the directives that we need to have the integration aspect there to have a just transformation. How to do that I'm not sure. We have asked the administrations to think about this. I don't know of any good solutions yet. We haven't been successful there." (City Official, Environment, Malmö")

The emphasis on integration reflects the city's position in addressing migration in terms of integration-related responsibilities within social welfare, including employment and housing. Disconnects between the environmental and social in Swedish environmental policymaking is evident here and has been documented before (Khan et al., 2020). The influence of ecological modernisation (Fudge and Rowe, 2001) has justified this separation. Within this discussion, Arora-Jonsson (2017a) argues that it is essential to question underlying assumptions that environmental problems can be tackled solely through scientific environmental knowledge. Hence, moving beyond disconnects does not just imply integrating the 'social' and 'ecological' as a matter of integrating silos. Instead, we add here that it is crucial to move beyond assumptions not only about what constitutes valid knowledge, but also valid sustainability action. Our findings show that there are missed opportunities to embrace solutions and plural ways of doing sustainability informed by cultures, faith, and lived experiences from across the world.

In discussions about migrants' contributions to sustainability, policymakers in our interviews refrain from making distinctions between migrants or non-migrants or from pointing out migrant groups as capable of making contributions different from anyone else, emphasizing that this could be discriminatory:

"We don't do that division. If we have a sustainability project that is aimed towards a school or all residents in a neighborhood ... we never divide it. It's not specifically directed towards newcomers, but

they are just as welcome as anyone else." (City Official, Housing, Malmö)

"Migrants that are already in Sweden are affected in the same way as the people who were in Sweden from the beginning. When we talk about the ecological, it is the same for everyone." (National Official, Climate and Environment, Sweden)

The idea that migrants carry diverse ways of thinking about sustainability that is valuable to their destination areas is not captured here and depictions of migrants as sustainability actors are few. Moreover, the idea that the ecological is the same for everyone, does not just obscure the many plural meanings, values and knowledges about the ecological (Arora-Jonsson, 2017a; Nightingale et al., 2020), it also overlooks the fact that the ecological is experienced through a range of intersectional injustices (e.g. Taylor, 2002).

We elaborate here that in moving beyond technocratic approaches, there are opportunities to broaden collaborations with civil society actors. Previous studies shows that local mosques and churches are key municipal collaborators on integration issues (Fry and Islar, 2021). Connecting with these spaces to invite diverse and plural migrant voices into environmental policy-making would contribute to overcoming disconnects and tap into opportunities available through the mobile realities of city residents. To do so, it is necessary to embrace a broader view of migration governance that goes beyond integration.

In addition, whilst political ecology is a valuable perspective to identify social-environmental disconnects (Heynen, 2014; Nightingale et al., 2020), it does not fully explain the migration-sustainability divide documented here. Our contribution thus comes through to demonstrating new avenues for re-centering migrants in sustainability policy and practice.

4.1.3. Swedish exceptionalism: Making of migrants as sustainability actors. The absence of migration from conversations around sustainability points us towards the next overlap in discourse, which is a framing of migrants and sustainability heavily focused on Swedish exceptionalism (Lundqvist, 2000; Bradley, 2009; Arora-Jonsson, 2017a). We apply political ecology here as a tool to deconstruct this discourse and later on, to contrast this with evidence of local scale dynamics from our survey data.

When situating migrants' role in sustainability policy, we detect an assimilationist approach both in media coverage and national policy perceptions, focused on disciplining and transforming migrants into sustainability actors. In our interviews, we find that the importance of recycling is repeatedly emphasized as a sustainability behavior that migrants should adopt from Swedish culture, resulting in a top-down narrative of teaching those who are perceived to know less about sustainability:

"We, in many ways, have gotten much further than other countries. People coming here can gain a deeper understanding of environmental issues in Sweden. We are good at recycling." (National Official, Environment, Sweden)

"It's about people coming to Sweden for different reasons, to make it easy to understand the things that are on the individual level, like how to recycle, and encourage reparations instead of consumption. Knowing all those parts that are about individual choice." (National Official, Environment, Sweden)

From interviews at the national scale, we note that sustainability is predefined by policy actors in line with an exceptionalist sustainability framing. There is a perception that Sweden is a role model for sustainability and 'Swedish' sustainability behaviour is something that migrants should learn. Notions that migrants should adapt to 'Swedish' norms and values prevailed in policy and media narratives:

"In order to be able to engage you must understand how it works in Sweden. What are the written and unwritten rules here. These things are important to be accepted by Swedes and be able to work for sustainability. You have to show that you understand how it is in Sweden and work with that." (National Official, Climate and Environment, Sweden)

"First, convey to newcomers that there are a number of nonnegotiable values that apply... Secondly, there are societal values related to religion, work, school, health, and sustainability where we reason together to find solutions. It is a question of give and take." (Expressen, 2018)

Swedish exceptionalism not only puts a certain cultural approach to sustainability in an unquestioned position of superiority, but it also feeds into an assimilationist approach to 'make migrants sustainability actors'. In this way, migrants' sustainability contributions, highlighted in section 4.2.2, are overlooked, and possibly discouraged. These findings elaborate on literature on urban policy where a Swedish identity of tidiness and recycling is enforced in migrant communities (Bradley, 2009). Further, narratives that emphasise the role of 'Swedes' in enlightening migrants about sustainability are reflective of narratives of Swedish democracy involving processes of teaching migrants to be good Swedish citizens (Dahlstedt and Hertzberg, 2007; Hübinette and Lundström, 2011). They are also reflective of a wider understanding of integration as a one-way assimilationist process with migrants expected to merge with the dominant culture and society (Dahlstedt and Neergaard, 2019). This includes the idea that traditional Swedish platforms for participation, such as associational life, are appropriate for everyone, which we note on the national policy scale:

"I think that [migrants can take part in transformations towards sustainability] through civil society and especially associational life. I think newcomers have some possibilities there." (National Official, Climate and Environment, Sweden)

Building on literature on Swedish democracy and migration policy (Dahlström, 2004; Arora-Jonsson, 2017b), traditional integration approaches may be a continuation of an 'assimilationist approach' to make migrants fit into the dominant society rather than promoting democratic spaces. Indeed, at the city level some note that association-local government collaborations within sustainability governance may be inefficient in promoting participation from some migrant groups. A coordinator of an urban farming project in Malmo expressed some of the project's shortcomings in relation to engaging newcomer women:

"We take it for granted that people know Swedish regulation and rules and how association life works, because that is one of the requirements (...) However, most of the urban farmers are young, and without generalizing too much, hipsters." (City Official, Malmö)

Sustainability exceptionalism, operating on the grounds of ecological modernization, shapes how policy-makers frame and understand spaces for sustainability engagements to focus on those that occur through traditional platforms of associational life, overlooking other forms of engagements.

4.2. Critically reframing migrant-sustainability narratives

In this section we present narratives emerging from interviews with local policy actors and survey results of migrants in the city. Our overarching point here is that narratives are a powerful tool of change and that deconstructing dominant narratives can pave way for new more plural ones. Local scale discourses show that there are pockets of new ones grounded in everyday realities exemplified by empirical findings in Malmö. Through our survey, we engage with the everyday lived experienced (Loftus, 2012) of migrants and sustainability and find countervailing actions and surprises given dominating policy discourses. There is thus opportunity to reframe the narrative from fragmentation and disconnect to a narrative that recognise the role of migrants for sustainability.

4.2.1. Migrants as sustainability actors

The narrative of 'making migrants sustainable' is contested, particularly at the local scale, leading us to identify a more novel narrative of 'migrants as sustainability actors'. This narrative involves highlighting the plurality of knowledges and perspectives that migrants bring to the city:

"Newcomers bring new perspectives and experiences from various parts of the world that can be useful in different ways, if we take them in. There are opportunities for good initiatives if we can bring these perspectives in, from all over the world, into Malmö." (Civil Society Representative, Malmö)

"I think there are good possibilities and that, if you come from another country, you have knowledge and experiences that we don't know of. The knowledge exchange is very important." (City Official, Urban Planning, Malmö)

At the national scale, we find small pockets of narratives of migrants as sustainability actors and critique towards national-scale policy that overlooks this:

"I feel like there is no interest in understanding what people bring with them and that's incredibly sad and such a loss for us. The knowledge that they have is not included and is always considered wrong. From the simple day-to-day meetings to the wider systemic issue of translating knowledge on agriculture which might be of use in our society. This is a complete failure." (National Official, Migration, Sweden)

The interviews, acting as a prompt for policymakers to think about connections between migrants and sustainability sometimes resulted in transformative conversations about possible connections:

"I saw that question [about opportunities for migrants to contribute to transformations towards sustainability] and thought it was so interesting because this is an aspect I haven't thought much about. When we talk about migration it's often that (...) we need to solve the climate crisis because otherwise people need to migrate. There's nothing wrong with that but this is a different aspect that we haven't approached yet" (National Official, Environment, Sweden)

In connection to emphasizing the knowledges migrants bring, policy-makers also point out barriers for migrants to engage with sustainability transformations, speaking of a 'loss of knowledge':

"People who have knowledge, who are educated in their home countries, come here, try to (...) contribute with knowledge, whether it's environmental, social, or economic, but they don't always get that opportunity. There's potential for improvement there. Unfortunately, discrimination in the labor market is common here. (...) There was a woman who had built a system providing electricity for a whole village in Iraq. So much competency and could have contributed to our society, but she applied for jobs for over ten years and didn't even get the chance to come for an interview. I'm thinking about this woman (...) and how unfortunate it is that we miss out on her skills whilst she's living in Sweden. We need to become better at inclusion." (City Official, Social, Malmö)

These quotes illustrate the multiscalar nature (Swyngedouw and Heynen, 2003; Sayre, 2015) of migrant-sustainability transformations where migrants' transformative potential is nested within and conditioned by structural factors. Diverse ways of thinking and living that are necessary for transformative change already exists in the city through migration flows, according to local policymakers, yet labour market discrimination significantly undermines their positive impact. Lack of informed understandings of migrants' sustainability contributions amongst national policymakers are identified by national actors themselves as limiting wider transformations. Hence, more transformative approaches to the governance of the migration-sustainability nexus would come through better understanding these whilst also addressing

structural conditions that limit some migrants' transformative potential.

Further, stories about what makes up barriers and exclusion can be divided into two strands: structural and individual conditions. Structural conditions include discrimination in the labor market, as mentioned, and poverty that some migrants experience:

"On the one hand they are forced to have a standard of living which definitely isn't beyond planetary boundaries, but on the other hand there are no possibilities to plan and make the best decisions for sustainability." (National Official, Migration, Sweden)

Individual conditions generally refer to lack of language proficiency or understanding for 'Swedish' society:

"The language is one part and to what degree you have integrated into society and learnt how things work." (National Official, Migration, Sweden)

These have different policy implications. Focus on the embeddedness of migrants within unjust structures calls for policy to address sources of exclusion, while focus on individual obstacles may justify assimilationist policies. At the same time, both strands frame migrants as unable to, for different reasons, contribute to sustainability transformations. It is thus necessary to examine actions associated with 'migrants as sustainability actors' at the local scale.

4.2.2. Practices, perceptions and experiences among migrants (countervailing actions and surprises given the discourses)

Here we present our results from our survey on migrants and nonmigrants in Malmö, engaging with representation of the everyday lived experience (Loftus, 2012) and material actions in the city. Results demonstrate that there are some practices in which the migrant group particularly stand out as sustainability actors.

While we cannot pinpoint sustainability practices as due to a particular cultural, educational, or migratory background, our results show that migrants hold a greater awareness of water saving practices to that of those born in Sweden. Specifically, rates of water-saving practices amongst international migrants were higher than in those born in Sweden (Z = 2.541 P = 0.0109, see Table 4). Previous literature has found that migrants living in Australia and the UK maintain water saving practices based on past experiences with water scarcity and irregular supply in countries of origin (MacGregor et al., 2019; Head et al., 2021). Religious identity has also been shown to play a key role, where Muslims with diverse migratory backgrounds were shown to conserve water based on teachings on prohibition of wastage and solidarity to other people in the community (Head et al., 2021).

Moreover, migrants stood out as sustainability actors as rates of volunteering in organizations to protect the environment were higher among international migrants than among those born in Sweden (Z = 3.715 P = 0.0004, see Table 4). The same was true for volunteering in organizations to protect people's rights, where rates were higher among international migrants than among those born in Sweden (Z = 2.67 P = 0.009, see Table 4). Simultaneously, rates of experiencing feeling like an outsider were higher among migrants than among those born in Sweden (Z = 4.08 P = >0.0000, see Table 4). These findings contrast perceptions

held by policymakers where migrants were identified as being too vulnerable to be sustainability actors. Instead, our findings show that social exclusion exists parallel with sustainability engagements.

Those born in Sweden showed higher rates of concern for a quickly changing environment than those born outside of Sweden ($Z=-2.01\ P=0.048$, see Table 4). However, in contrast to ideas of the recycling Swede within the 'Swedish exceptionalism' narrative, the analysis showed no statistically significant difference in recycling practices between those born in Sweden and those born outside of Sweden ($Z=-0.062\ P=0.942$, see Table 4). Additionally, the analysis did not show a statistically significant difference between those born in Sweden and those born outside of Sweden in rates of making efforts to reduce resources to protect the environment ($Z=0.32\ P=0.751$, see Table 4).

Informed by literature on discourses across scales (Adger et al., 2001), we find that local dynamics of migrant-sustainability interactions emerging from our survey results do not fit well with dominant public and policy discourse favouring technocratic and assimilationist framings. Although uncertainty remains regarding the reason and background to sustainability practices in Malmö, our survey results provide sufficient evidence to show that migrants are important contributors to sustainabilities in their urban destinations. Still, these individual expressions of sustainability are nested within other scales and structural factors. Evidence of feeling like an outsider among migrants is possibly a reflection of exclusionary narratives that were identified in policy interviews as inhibiting a more widely transformative role of migrants.

Our findings align with those of Turhan and Armiero (2019), emphasizing that for cities to respond to the convergence of migration and sustainability more comprehensively, it is necessary to adopt wider definitions of sustainability and more readily recognize the role, agency, and structural vulnerabilities of migrants. In addition, a political ecology informed by decolonial scholarship (Mawere, 2014; Arora-Jonsson, 2017a; Nightingale et al., 2020) can help push for a reconsideration of knowledge production and sustainability practice, moving beyond Swedish sustainability exceptionalism and towards sustainability transformations based on diverse knowledges and plural pathways.

4.3. Politics of scale (and why it matters)

The transformative potential of migrants for sustainability unfolds across fragmented dimensions and scales. Global discourses on migration-sustainability shape local ones, sometimes leading to political 'solutions' that are inappropriate for local realities (Adger et al., 2001). Malmõs sustainability approach follows Agenda 2030 which is incorporated into the municipal budget. Recent literature on the migration-sustainability nexus shows that the 2030 Agenda frames migration as a temporary, unplanned phenomenon to be managed, rather than as an inherent and longstanding part of sustainable development and social transformation (Adger et al., 2019). We note how this framing, although contested at times, trickles down to the city level.

Quotes from local-level policymakers show that there is uncertainty about the best way to reach out to some migrant groups for sustainability projects. At the same time, there is a willingness amongst policymakers to explore this further. The recognition of the value that

Table 4Sustainability behaviors and experiences between international migrants and non-migrants.

	Born outside of Sweden			Born inside of Sweden					
Variable of interest	25th	50th	75th	25th	50th	75th	Z score	P value	Count
Concerned about quickly changing natural environment	4	5	5	4	5	5	-2.01	0.048*	769
Engage in volunteering to protect the environment	1	1	2	1	1	1	3.715	0.0004*	808
Feeling like an outsider	2	2	3	1	2	2	4.08	>0.0000*	708
Make efforts to reduce resources to protect the environment	4	4	4	4	4	4	0.32	0.751	790
Recycling practices	4	5	5	4	5	5	-0.06	0.942	810
Volunteer to protect people's rights	1	1	3	1	1	2	2.67	0.009*	804
Water saving practices	3	3	4	2	3	4	2.541	0.0109*	809

migrants bring in terms of sustainability knowledge and structural barriers some face, including labour market discrimination, is possibly reflective of the continuous and direct interactions that local officials have with migrant groups in the city, interactions less common at the national scale.

Yet, recognizing differences in perspective will not necessarily lead to more plural and inclusive approaches in practice unless there are incentives to reconnect to unpacking internal discourses on transformations. It is essential to overcome inaccurate assumptions about society as static and instead recognize migration as inherent and an integral part of progress towards sustainability. This involves incorporating people's contributions to sustainability, as informed by migration and pre-migration experiences, in the places they live. To do so, it is essential to connect with less obvious spaces of sustainability, beyond the typically 'Swedish' way of engaging in societal issues as has been criticized before (Dahlstedt and Hertzberg, 2007; Arora-Jonsson, 2017b). In Malmö, municipal collaborations with mosques and other religious organisations already exists yet limited to 'social' issues (Fry and Islar, 2021), specifically following the rescaling of integration responsibilities to the city (Scholten and Penninx, 2020, p. 91). Our findings show that the potential for these spaces to influence sustainability policy in a broader sense, promoting policies grounded in the lived realities of migrants across scales, remains largely untapped.

5. Conclusions

Whilst past literature has established that migration can have a substantial impact on societal transformations and sustainability in areas of origin, our study contributes to exploring how migrants and migration interact with sustainability in their urban destinations.

Through a lens of urban political ecology, we examine new evidence on how cities cope with synergies and contentions between migration governance and sustainability governance and how migrants and nonmigrants themselves identify their contributions to sustainability. These findings point to misconceptions in policy and public discourse on migrants and sustainability. Migrant and sustainability discourses at urban to national scales are dominated by framings of social unsustainability and sustainability exceptionalism. These discourses largely overlook the everyday sustainability actions and lived realities of migrants in the city. In contrast, our survey of perceptions by migrants and non-migrants reveals that migrants engage more extensively with a number of sustainability actions compared to non-migrant residents, whilst simultaneously experiencing greater levels of social exclusion. Our findings bring evidence to counter assimilationist approaches and top-down narratives of the migrant-sustainability nexus and call for sustainability policy that embraces plurality, addresses structural injustices and more readily recognize the mobile realities of our modern world.

An area for further research would be to better understand the dynamic nature of sustainability values and practices and how they change across a lifetime and because of major life events, including that of migration. In addition, further research is necessary to understand factors influencing migrants' sustainability practices in urban areas both in rapidly growing cities, and in long established urban areas with long histories of assimilating new migrant populations. Emerging findings of migrants as sustainability actors can hopefully inspire critical reflections on migration within sustainability policy, practice, and research, paving the way for more transformative narratives of the migration sustainability nexus.

CRediT authorship contribution statement

Claudia Fry: Writing – review & editing, Writing – original draft, Visualization, Investigation, Formal analysis, Data curation, Conceptualization. Emily Boyd: Writing – review & editing, Writing – original draft, Supervision, Formal analysis, Conceptualization. Mark

Connaughton: Writing – review & editing, Writing – original draft, Investigation, Formal analysis, Data curation. W. Neil Adger: Writing – original draft, Project administration, Funding acquisition, Methodology, Conceptualization. Maria Franco Gavonel: Writing – review & editing, Methodology, Formal analysis. Caroline Zickgraf: Methodology, Conceptualization. Sonja Fransen: Writing – review & editing, Methodology. Dominique Jolivet: Methodology. Anita H. Fábos: Conceptualization. Ed Carr: Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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Author Contributions

CF coordinated the overall drafting of the article and contributed to data collection and analysis of the interviews and survey. EB contributed to conceptualizing the research, developing the theoretical framework, supervising the process, drafting and critical revisions. MC contributed to the collection and analysis of media articles and drafting of the article. WNA contributed to the theoretical reflections and revisions of the paper. CZ, SF, DJ contributed to the development of the research methodology. MFG, AF, CZ, SF and EC contributed with critical revisions of the paper.

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