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International solidarity for a de-colonised Just Transition: electric vehicles and lithium in Mexico and Europe

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ABSTRACT

The term 'Just Transition' (JT) gained global prominence through the Silesia Declaration on Solidarity and Just Transition agreed at the 2018 UN Climate Change Conference (COP24). However, there has been a gap in both theory and practice regarding how to develop the global solidarity called for in this declaration. Some have even viewed JT as another form of neo-colonialism, benefitting the Global North through exploiting the Global South. This paper discusses how to avoid perpetuating colonial dynamics through JT by developing worker-led civil society solidarity across the Global North and South. It focusses on Mexico where vast increases in lithium extraction will be necessary to enable the enormous increase in the use of Electric Vehicles proposed for the Global North. While the main beneficiaries of this technology transition will be the companies, governments and consumers of the Global North, the costs will be borne by low-income communities in Mexico, among other Global South localities. Strategies are suggested for a de-colonised JT led by the relevant unions, including car workers.

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Introduction

The 'Just Transition' (JT) concept was originally developed to highlight and address the equity and justice challenges associated with the transition to ecological sustainability (Stevis, 2019a; Stevis & Felli, 2015, 2016). It attracted global attention with the Silesia Declaration on Solidarity and Just Transition, now endorsed by more than 50 national governments, including the UK Government (UNCCC, 2018a). This declaration warned that public policies to reduce emissions will face social resistance if they are not accompanied by measures to protect livelihoods for those whose jobs will be lost or transformed (UNCCC, 2018b). It also noted the particular difficulties for Low- and Middle-Income Countries in transitioning to sustainability and emphasised the need for international coordination and worker participation in social dialogues. This highlighted key challenges for JT in terms of engaging workers and ensuring that JT policies that seem just at the local or national scale do not externalise harm elsewhere. There remains a

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gap, however, in both theory and practice, regarding how to develop the global solidarity called for by the Silesia Declaration.

JT has even been critiqued as a form of neo-colonialism, potentially leading to the outsourcing of environmentally detrimental production or new forms of 'green' extractivism from the Global South (e.g. Okpanachi et al., 2022; Shehabi & Al-Masri, 2022; Zografos, 2022; Zografos & Robbins, 2020). Analysts have emphasised that JT cannot just be limited to the Global North (e.g. Hirsch et al., 2017; Rodriguez-Labajos et al., 2019; Satgar, 2018) and highlight the need to comprehend how shifts towards JT in the Global North will impact on livelihoods and resources in the Global South (e.g. Newell & Mulvaney, 2013; Stevis, 2013, 2019b). Scholars have also stressed that a full understanding of JT must combine inclusiveness with justice (e.g. Bell, 2021; Boss et al., 2023; Stevis & Felli, 2020). Stevis and Felli (2020) have argued that profound reorganisation of the global political economy is required so that it no longer perpetuates divisions of labour that reproduce North–South inequality. This, they argue ' … requires that unions, environmentalists and all egalitarian social forces, North and South, learn from each other and develop a politics of planetary solidarity' (Stevis & Felli, 2020, p. 7). In support of this call, in this paper, I explore how this solidarity could be developed around JT, a concept that is potentially a strong rallying point for establishing networks between workers and civil society groups, within and across borders.

Hence, this paper arises from a concern that JT discourse and practice can minimise, or render invisible, impacts on the Global South. It was initiated following a stay as a visiting academic at the Mexican Faculty of Latin American Social Sciences (FLACSO) in 2023. Here, I began to meet with workers and academics to study the question of how to build solidarity across borders so as to achieve a de-colonised and globally fair transition to sustainability. I wanted to consider how labour unions and social movements, rallying around the concept of JT could build the internationalism and solidarity required. The paper addresses a gap in the academic and practice literature on how to mobilise workers and align JT policy across multi-scalar (local, national, international) priorities and concerns to protect livelihoods and wellbeing in all countries impacted by transition. It is fundamentally exploratory though seeks to make some analytic generalisations.

The discussion considers how to decolonise JT by focussing on a particular case, i.e. lithium mining in Mexico, an upper middle-income country. Lithium is one of several critical minerals used in the production of lithium-ion batteries needed for electric vehicles (EVs), alongside aluminium, cobalt, graphite and manganese, among others (Ellingsen & Hung, 2018). The World Bank (2020) suggests that the extraction of critical minerals may increase by almost 500% by 2050 to meet the growing demands for 'green' technologies, including EVs. The use of lithium to produce EV batteries has already increased substantially over the last 20 years (Obaya & Céspedes, 2021) and the International Energy Agency (IEA, 2020) predicts that the demand will increase from 25,000 tons in 2019 to more than 350,000 tons in 2030. This expansion is due, in large part, to the priorities proposed in the Net Zero policies and decarbonisation plans of the Global North. For example, as the European Environment Bureau (EEB, 2023a, p.4) notes, 'So far, in line with the global trend, the decarbonisation strategy of governments across the EU has been centered around the electrification of the transportation sector'. In the UK, the Government has banned the sale of new petrol and diesel cars, originally by 2030, but recently

changed to 2035 (BBC, 2023). It intends to accelerate the transition to EVs, offering grants to consumers to help purchase them (BBC, 2020).

While focussing on Mexico, lithium and EVs, it is anticipated that this paper may also be a useful contribution in relation to other situations where extractivism from the Global South appears to be part of the requirement for achieving sustainability transitions in the Global North.

Is JT neo-colonial?

There is still considerable debate about the JT concept and related demands (Felli, 2014; JTRC, 2018; Kalt, 2021). Wang and Lo (2021) identify five strands within the JT literature, including JT and the labour movement; JT as an overarching framework for justice; JT as socio-technical transition; JT as a governance strategy; and JT in terms of public perceptions of sustainability transitions. Various types of JT have been identified and considered, ranging from a 'worker-focused'/'managerial' approach where society does not fundamentally change, to a more radical, 'structural' or 'transformative' endeavour (Just Transition Research Collaborative, 2018; Kalt, 2021; Krawchenko & Gordon, 2021; Morena et al., 2020). A good deal of the discussion on JT is currently at the less radical end of the spectrum, mostly about technological change. This approach has the potential to perpetuate colonial mindsets and actions by failing to consider power relationships and the need for broader social change.

During COP26 in 2021, sixteen governments including United States, United Kingdom and the European Commission signed a declaration stating 'We recognise our role in working to ensure that no one is left behind in the transition to a net zero and climate resilient future. We recognise that all countries must benefit from the opportunities offered by sustainable and JTs' (UN, 2021, np). In spite of this, JT has not been developing as an inclusive process and patterns of domination in international relations continue to prevail.

Within the JT literature, four key intertwined arguments implicating JT as a potential neo-colonial programme can be discerned (1) that it is based on extractivism within the Global South; (2) that it is inadequately connected across borders or coordinated internationally; (3) that it is based on relationships of domination; and (4) that it is based on unconscious and technocratic policy making, imbued with assumptions of superiority.

With regard to first of these, JT, is critiqued for continuing extractive and exploitative processes. For example, Asad Rehman, director of the UK NGO 'War on Want', has raised concerns that the cobalt, lithium, silver and copper extraction that will replace oil, gas and coal will be ' … a story of contamination and depletion' of the Global South (2019, np). This point is also made by critical scholars. For example, Shehabi and Al-Masri (2022) and Okpanachi et al. (2022) argue that renewable energy development in Morocco reflects ongoing colonial relationships between North Africa and the European Union, characterised by the flow of cheap raw materials from the Global South to the Global North. Furthermore, as Zografos (2022, p. 38) states, 'The concern here is that the communities and ecosystems from which these resources are extracted risk becoming Green Sacrifice Zones'.

The second critique, that JT is not yet developing in a joined-up way across scales, is based on concerns that improvements in one nation or locality may externalise or

outsource harm elsewhere. Environmental justice scholars and activists have emphasised that many renewable energy technologies have human health and livelihood implications for those already disadvantaged (see Levenda et al., 2021). Changing production nationally can impact on other nations in terms of increased land-grabbing (e.g. for biofuels); job-losses (e.g. when components or materials are no longer needed); outsourcing and waste-dumping (e.g. when legislation or costs make it more financially attractive than local manufacture and disposal). For example, projects supported under the Clean Development Mechanism, have led to struggles over land in the Global South (Newell & Bumpus, 2012). Moreover, High-Income Countries often outsource emissions to Low- and Middle-Income Countries when shifting to a less carbon intensive economy, though there is a complex pattern (Baumert et al., 2019). While there may be exploitative connectivity across supply chains, there are relatively weaker solidaristic civil society connections across borders in terms of trade unions and communities. Wilgosh et al. (2022) argue that internationalisation of JT has weakened its trade union roots and replaced this with forms of investment, technical innovation and ecological modernisation.

With regard to the third argument, it is considered that, when there are extreme financial inequities and power imbalances within and between countries, there can be no true dialogue. Therefore, JT decision-making and the changes that result from this can favour the better off and the Global North. This continues to perpetuate exploitation and inequalities within and between North and South. While, at the national level, participation in JT dialogues may be limited for marginalised groups (Bell, 2016, 2020; Boss et al., 2023), arguably the most excluded are those who are highly impacted by the decisions made but are far away. Hence JT dialogue must include the least powerful and be simultaneously global, national and local.

The fourth argument is that JT can become infused with colonial mindsets that would impose Western models of JT on countries in the Global South. JT projects can be a threat to national sovereignty as decisions that affect the populations of the Global South are taken by technocrats and external governments and companies (Hamouchene and Sandwell, 2023). Whether framed as expert-driven policy or examples of good practice, it is important to avoid this scenario in developing cross-border inclusion in sustainability transitions. Hence, JT, in the Global South and everywhere, needs to be based on the concerns and material realities of the communities involved. It needs to be built on the many examples of progressive and solidaristic environmentalism of the Global South (see, for example, Bell, 2014, 2015, 2017a, 2017b on examples from Latin America). While it is important to disseminate ideas and technologies across borders and establish international cooperation and coordination, it cannot be at the expense of undermining the self-determination of those impacted locally.

When JT is seen to be solely a technical and managerial problem, many of these neocolonial mindsets and actions become invisible. This enables them to continue unchallenged. The structural/transformative interpretation of JT, however, enables consideration of, not only how to improve the lives of groups of workers, but also their communities, extending to society as a whole and across nation-state boundaries. In its widest interpretation, JT requires equity, justice and inclusion at local, national and global levels. Several analysts, thus, call for this more transformative vision of JT (e.g. Bell et al., 2023; Ciplet, 2022; Winkler, 2020).

Here I argue that, in order to support JT inclusiveness and avoid entrenching colonialism, there needs to be a bottom-up solidaristic approach. This will help to avoid the transition to sustainability working only in the interests of the most powerful. Hence, I focus here on civil society, in particular labour unions, as this is where JT originated and where there is the most potential for organising worker dialogues. To highlight these colonial dynamics and make the issues more concrete, the case of Mexico will now be discussed in relation to lithium extraction.

Mexico and lithium

Mexico was selected as the case study for this paper as it has signed the Silesia declaration (UNCCC, 2018a) and has some of the largest lithium reserves in the world (Marmolejo Cervantes & Garduño-Rivera, 2022). The context is particularly interesting in that Mexico officially nationalised its lithium industry in 2022, giving the state exclusive rights over exploration, exploitation and use of the mineral from new mines (Gobierno de Mexico, 2022). Since EVs, which currently depend on lithium extraction for their batteries, are a major platform of the sustainability policies of the Global North, this is a timely case to consider. This exploration could be described as an 'explanatory case study' (Yin, 2013) since the case is used to investigate the potential for developing solidarity across borders, under the banner of JT.

In 2018, the MORENA party came to power (Movimiento Regeneración Nacional – National Regeneration Movement), a major Mexican left-wing political party, led by Andrés Manuel López Obrador. In the same year, at the COP24 of the United Nations Framework Convention on Climate Change (UNFCCC), Mexico signed the Declaration of Silesia. However, discourse using the terminology of JT still appears to be limited in Mexico except at the local level, though many policies and activities relate to the concept. This is typical of the situation in many countries around the world, where, while there is little discussion of JT using this concept, there are policies and action on green jobs; reskilling for sustainability; social safety nets; clean energy subsidies and circular economy. For example, Mexico is part of the Climate Action for Jobs Initiative led by the International Labour Organisation (ILO) which commits to creating decent green jobs, developing training programmes and implementing innovative social protection programmes that facilitate a JT (ILO, 2020).

While Mexico has had lithium mining operations for some time, this has stepped up significantly in recent years. In 2018, Bacanora Lithium announced that it had discovered what could be the largest lithium reserve in the world, in Bacadéhuachi, Sonora, Mexico. The reserves were estimated to be equivalent to those of almost half of the world's five largest lithium mines combined. Mexican civil society organisations and indigenous peoples have expressed concern about the social and environmental impacts of lithium mining in this and other areas of Mexico. For example, in March 2020, the Mexican Network of People Affected by Mining (REMA), made up of communities, organisations and individuals who have been negatively impacted by the socio-environmental impacts of mining in Mexico officially opposed the Bacanora lithium project in Sonora. This network particularly expressed concern about impacts on water resources, the environment and communities. It was also critical of the limitations of the nationalisation of Mexico's lithium, noting the reform only focused on

future mines and did not take control of existing mines (Duran, 2022; Ruiz Leotaud, 2022).

The toxicity of lithium mining and wider EV production and disposal have been widely documented. One of the primary concerns about lithium extraction is the vast amounts of groundwater it requires. The method of extracting lithium from natural brines causes the loss of about 95% per cent of the brine-extracted water, in turn depleting the natural aquifers that nearby communities depend on. Moreover, lithium is highly mobile in surface and groundwater and readily taken up by plants. Unintended leaks and spills arising from evaporation technology can be toxic to local flora and fauna with resulting harm to the wider ecosystem, agriculture and local communities. This is very problematic as 'High environmental Li [Lithium] levels adversely affect the health of humans, animals, and plants' (Bolan et al., 2021, p. 1).

In March 2023, Tesla announced that it will build its largest and most modern 'gigafactory' in Mexico, predicted to produce 1 million EVs per year in the country (Mexico News Daily, 2023). While this could be interpreted as a less extractivist relationship with Mexico, since industrialisation will happen within the country, the problems with lithium mining need to be part of the picture in assessing the costs and benefits for Global South countries, if there is to be a transition that is just for all.

Net zero and the JT strategies of global north

It is important to consider alternatives to internal combustion engine vehicles (ICEVs) as they are major greenhouse gas (GHG) emitters as well as causing other social harms, including pollution, noise and accidents. EVs, particularly electric cars, as opposed to buses and scooters, are widely proposed as the main alternative to transport dominated by ICEVs in the Global North. For example, the EU intends to increase the number of EVs on European roads by 30 million by 2030, implying a 50-fold increase from 2020 (ACEA, 2020).

However, as the European Environment Bureau (EEB, 2023a, p. 4) have observed '… the idea of carrying out a full electrification of the mobility system with no change in mobility patterns raises some eyebrows in the scientific community', with scepticism arising in part from the significant raw materials required. There are significant problems with making mass production of EVs a key solution, beyond the lithium mining discussed above. EVs higher upfront costs hinder their accessibility to the wider population. The cost of battery technology and charging infrastructure are also significant hurdles, making it difficult for most people to transition to electric cars, especially in Low- and Middle-Income countries. Furthermore, despite their lower carbon emissions during use, EVs still have a notable environmental cost in terms of resource consumption and waste generation. The production of batteries and other EV components requires significant amounts of natural resources, which may lead to overexploitation and potential scarcity. In addition, the wear and tear of EV components, particularly brakes and tyres, release harmful particulate matter, contributing to air pollution.

There is a great deal of literature on life cycle analysis (LCA) of EVs with a wide range of results, often due to the differing designs of the studies, assumptions and datasets used. A review of 38 LCAs found that, in general, EVs appear to have lower life cycle GHG emissions than ICEVs (Lattanzio & Clark, 2020). While EV production has a higher

environmental impact than that of ICEVs, this may be offset by lower vehicle in-use GHG emissions, though this depends on the source of the electricity used to charge the vehicle batteries. However, climate change is not the only environmental crisis we face as, globally, nine planetary boundaries are now being overstepped (Steffen et al., 2015). EVs pollute differently to ICEVs, tending to emit less carbon monoxide and nitrogen oxides but more particulate matter and sulphur oxides (Lattanzio & Clark, 2020). It may be that the impacts on the Global South at the sites of extraction are the most problematic. According to Lattanzio and Clark (2020, p. 31), EVs ' … could be responsible for greater human toxicity and ecosystems effects than their ICEV equivalents, based on current mining and recycling technologies'. It has been estimated that the potential human toxicity effects of the production phase (extraction, processing and manufacturing) of EVs are between 2.2 and 3.3 times greater than for ICEVs (Hawkins et al., 2013).

Some argue that improved technology will minimise the lithium problem, predicting that most EV batteries will be refurbished and recycled (e.g. Jolly, 2023). Under market economies, whether this will happen will depend largely on whether it is more profitable for companies to recycle than extract. Government regulations and incentives will be required to ensure there are targets and incentives for recycling (Hanjiro & O'Dea, 2021). While this will help in the longer term when enough used batteries become available, this will not impact on the shorter-term extraction problems. Moreover, as with other products, there are limits to the number of times a material can be recycled and recycling processes often create pollution, with the hazardous facilities often being situated in low-income communities (Bell, 2020). In general, managing end-of-life EV components presents challenges in relation to recycling and safe disposal, as improperly handled batteries and other components can contribute to environmental contamination. Therefore, recycling of materials will not be the panacea predicted with the result that social and environmental harm in the Global South will be significant.

However, the Net Zero strategies of the Global North tend to be silent on impacts in the Global South. For example, a wordsearch of the UK government's Net Zero strategy (UK Government, 2021) shows no mention of the terms 'Global South', 'developing countries' or 'Low-Income Countries'. It does not mention 'justice' at all. Yet, the report mentions 'technology' 125 times; and 'electric vehicles' 49 times (including abbreviation of 'EV'). However, when discussing 'critical minerals', it states, 'We are actively supporting the adoption of transparent, ethical and responsible mining practices, reflecting environmental, social and governance (ESG) considerations, and are participating in the development of global standards through the British Standards Institution' (p. 237). Following this publication, the government established an Expert Committee on Critical Minerals and published a UK Critical Minerals Strategy (UK Government, 2022). Yet a word search of the latter also reveals no mention of JT; justice; Global South or Low-Income Countries. 'Developing countries' are mentioned once, but in the context of 'corruption' (p. 36). By comparison, technology is mentioned 25 times and EVs 19 times.

If we look at specific JT policies, few countries have these, as yet. However, there has been some embedding of JT policy within government in a few countries. Spain and Scotland are discussed briefly here. These nations were selected as they have specific JT policies and are often considered 'advanced' in terms of their Net Zero visions (e.g. KPMG, 2021; McKinsey, 2022). However, in both countries, there is no evidence of consideration of impacts on the Global South in key JT documents. Scotland established an

independent Just Transition Commission in 2018. It also now has a Minister for Just Transition Employment and Fair Work, and a Just Transition Fund. In 2021, the Scottish Just Transition Commission published 'Just Transition Commission: A national nission for a fairer, greener Scotland' (Scottish Government, 2021). This document does not mention the terms 'Global South', 'developing countries', or 'Low-Income Countries', or any similar descriptor, at all. 'Justice' is mentioned but not in relation to the Global South. Spain has a Just Transition Strategy (Government of Spain, 2020) and similarly does not mention terms relating to the Global South. Justice is mentioned twice, but not referring to communities beyond national borders. For example, the document states: 'This Just Transition Strategy aims to build on the internationally approved framework and accompany the ecological transition in Spain, and thus achieve the best results in terms of employment generation and social and territorial justice and cohesion in our country' (p. 10). If these countries are indicative of a wider pattern, the Global North nations are developing their Net Zero and JT policies largely without reference to the Global South.

In addition, in the face of concerns about increasing international tensions in the scramble for critical mineral, some nations are making moves to buttress domestic energy security by becoming less dependent on foreign supplies. Expressing fear of regime changes or conflicts with the mineral supplying countries, the Global North policies state that they are considering how to source lithium and other critical minerals domestically (e.g. EU Commission, 2020; UK Government, 2022). For example, the UK's Critical Minerals Strategy (UK Government, 2022) sets out a plan to secure supply chains by boosting domestic capability to mine and refine these resources. Similarly, in the US, the Inflation Reduction Act 2022 (IRA) commits to increasing the domestic supply of critical minerals, including lithium (US DoE, 2023). While this may relieve some of the pressure on the Global South, the sites for extraction within the Global North are more likely to be in disadvantaged areas, because of the lack of power and influence of these communities (see, Bell, 2008, 2014, 2020).

With critical mineral markets largely dominated by China, the countries of the Global North also aim to diversify supply (e.g. BEIS, 2023). This might mean looking to Mexico and other nations of the Global South, such as India where large reserves have recently been identified (BBC, 2022). In the US, Clean Vehicle Credits, enable EV tax credits with the proviso that the materials used to construct the vehicle must come from either the US or those nations that the US has a free trade agreement with, which would include Mexico. Moreover, the IRA added a new requirement for final assembly in North America, defined as 'United States and Puerto Rico, Canada, and Mexico', increasing the possibility that EV manufacture and lithium extraction in Mexico could increase.

Building solidarity

There have been some initiatives from governments and supra-national organisations to support Just Transition in the Global South. For example, the Just Energy Transition (JET) Partnerships facilitate international financing from wealthier donor countries to a selection of heavily coal-dependent nations to enable them to achieve a 'just energy transition'. However, experience indicates that this financing tends to favour the private electricity sector so that the benefits become concentrated in the hands of those who already have wealth, land and capital i.e. the corporations and the affluent (Lenferna,

2023). Commenting on the South African – EU JET Partnership experience, where energy poverty has increased for low-income South Africans since initiation of the programme, Lenferna (2023, p. 1) argues ' … global South countries must be critical of JET Partnership funding models, as they may be used as tools to entrench the interests of international financiers who seek to dominate the clean energy future'. The proposed Global Green New Deal (GGND) also tends to focus on finance and technology transfers from the Global North to the Global South. According to Chen and Li (2021, p. 170), while including poverty reduction as a priority, the GGND proposals ' … give insufficient consideration to the internal socioeconomic structure within the Global South countries and the unequal global division of labour'. They note that the incoming capital continues to secure profits at the cost of labour, relying on exploitative practices such as informality and low wages. These experiences indicate that market, private and even state attempts to financially support the Global South in their transition, often fail to reflect on how their practices and policies can undermine environmental and social justice in in the recipient countries. Though climate reparations are vital, more needs to be done to ensure climate financing can benefit the least well off.

While the environmental transition policies of the Global North frequently render invisible the impacts on the Global South, we need to look to the civil society organisations, in particular labour organisations, for developing the cross-border solidarity necessary to address this. 'Solidarity' has been defined as ' … reciprocal relationships of subjective morality and responsibility towards one-another that bind humans together' (Kumar & Taylor Aiken, 2021, p. 201). Like JT, the concept has had different interpretations and uses over time and context (see Laitinen & Birgitta Pessi, 2014). Beck and Brook (2020) highlight that solidarity is reciprocal and workers are mutually reliant on each other, distinguishing solidarity from charity. It has also been asserted that solidarity occurs with the recognition of shared working-class interests, going beyond the particular workplace (Fantasia, 1988).

Transnational workers' solidarity is now considered crucial for the future of labour organisations and social justice struggles (Dobrusin, 2016; Lambert, 2014; Nastovski, 2022). Neoliberal globalisation has often meant a 'race to the bottom' in terms of social and environmental conditions as workers and industries have had to compete across borders. While this makes it even more important that unions coordinate internationally, sometimes unions have acted against workers in other countries (Scipes, 2010). Johns (1998) distinguished between 'transformatory' and 'accommodationist' solidarity with regard to union relations across borders unions. Transformatory solidarity is about national unions supporting those in other parts of the world, whether or not there will be a benefit for themselves. Accommodationist solidarity may be more about protecting the domestic situation. For example, promoting unionisation and improved labour standards abroad can also reduce outsourcing of work, saving jobs and maintaining wage levels at home. A heightened form of transformative solidarity is where workers identify themselves as being part of an international working class, such that they put class before 'national' interests (Johns, 1998, p. 260).

There are several international trade union organisations that support coordination across borders including the International Labour Organization (ILO), the Global Union Federations (GUFs) and the International Trade Union Confederation (ITUC). However, it is recognised that internationalism has often been difficult for trade unions (e.g. Ford &

Gillan, 2015; Stevis, 2019b) and this may also be the case in relation to JT. Firstly, because workers must become aware of the impact of the changes across borders. Secondly, because increasing scale may take the focus away from the local and the shop floor, undermining the potential for grass roots engagement. Thirdly, because workers in the Global North and Global South may be in very different economic and social positions. Grady and Simms (2019), focussing on the UK, argue that in recent years, labour has become somewhat divided between those who have secure employment and increasing numbers who do not. Since this kind of stratification also exists internationally, differences in security may also be divisive at the global scale. While workers in the Global North are becoming ever more casualised, informal and insecure work is much more common in the Global South, with the difference in situations having the potential to undermine perceptions of shared experience. These factors might explain why, as Ryland and Sadler (2008) found, grassroots workers do not necessarily understand or aspire to the internationalism that their union leaders seek. It has also been argued that transnational labour movements have historically been dominated by masculine heterosexuality and this has made it harder for some groups to engage (Franzway, 2016).

As Gramsci's work highlighted, there is a complex relationship between civil society, the state and hegemonic economic elites. Civil society organisations, including trade unions, can be agents of the state and economic elites as well as counter-hegemonic forces, opposing the dominant ideologies. To achieve social change, Gramsci emphasises the importance of educating, organising and developing political consciousness (see Katz, 2006). Hence, in the face of what might seem competing interests among workers in the Global North and Global South, it is necessary to identify common interests and to articulate those interests. As Grady and Simms (2019) note, solidarity can happen contrary to personal interests and can be given in a spirit of identity with, and support for, those who have less power in society. As work conditions deteriorate in the Global North, there may be even more scope for empathy and common identity with workers in the Global South. There are examples of JT-framed solidarity across borders (see, Asproudis et al., 2022; Brecher, 2018; Hampton, 2015). Brecher (2018), for instance, notes alliances of unions forming around environmentalism and JT, both within and between countries, including the formation of the BlueGreen Alliance and the Labor Network for Sustainability. The International Trade Union Confederation (ITUC) has also been focused on developing a JT for workers internationally. It has organised global labour participation in UN climate conferences. There is also the Trade Unions for Energy Democracy (TUED) organisation, which includes thirty-six unions from twelve countries. Furthermore, Bouzarovski (2022) discusses the Right to Energy Coalition as an example of a solidaristic JT approach. This is a European-wide civil society movement spanning trade unions, anti-poverty organisations and environmental and health organisations.

Conversations on solidarity around a JT

In January and February 2023, during my academic visit to FLACSO, I discussed the topic of JT and solidarity across borders with academics and workers in Mexico. Virtually none were working on this theme directly but many were thinking about related themes such as degrowth, transitions to sustainability, participation in environmental decision making and workers' rights (e.g. Faculty of Latin American Social Science (FLACSO); National

Autonomous University of Mexico (UNAM); Friedrich-Ebert-Stiftung and Centre for Demographic, Urban and Environment Studies (CEDUA), College of Mexico; Confederation of Mexican Workers (CTM); Regional Confederation of Mexican Workers (CROM) and the National Union of Mine, Metal, Steel and Allied Workers).

In relation to the question of EVs and lithium, it would be particularly important to discuss JT with lithium miners and car workers and their communities. Mexico is the seventh-largest vehicle manufacturer globally, accounting for approximately 4% of GDP, with 90% of the vehicles produced being exported (ITA, 2022). It is reported to employ over a million people in the country (Bembeneck, 2023). On this visit, I was able to converse with the car worker union leaders as well as some of the major union leaders that cover mining. In particular, I attended the 'Trade Union Seminar from Labour Reform to Sustainable Transformation in the Mexican Automotive Industry' – hosted by the Friedrich Ebert Stiftung (FES) Foundation. The unions present included the Confederation of Mexican Workers (Confederación de Trabajadores de México (CTM)), the largest confederation of labour unions in Mexico and the National Union of Mine, Metal, Steel and Allied Workers. The meeting occurred in the context of the implementation of the sweeping labour reform law of 2019, giving workers the right to bargain collectively through independent unions, rather than having to belong to the union imposed on them by the company (MSN, 2019). These imposed unions were compliant with managers and usually opposed to strikes as was the case with General Motors in Silao (Rothstein, 2016) where, after passing the law, the workers chose another union to represent them (New York Times, 2022).

In the stream on sustainability at the conference, there was much enthusiasm among the workers present for a shift to EVs. As an academic from the Global North, I did not want to impose my views or dominate the agenda. However, although it seemed a difficult subject to broach, I initiated a discussion about some of the problems of replacing the private car ICEVs with EVs, since this seemed to be the elephant in the room. Some of the delegates were based in Sonora and also voiced concerns about the impacts of the lithium on their communities and questioned who would benefit from the extraction. Others were already focused primarily on public transport projects and so welcomed this discussion. However, from their body language, it appeared this perspective was not initially welcomed by some of the attendees present. Even so, we eventually began to discuss the possible alternatives to a wholesale shift of one form of private car to another.

Hence, in the meeting and subsequent follow on discussions, we talked about a variety of options that could come under the umbrella of JT, including (1) shorter working hours for car workers with the same or better pay; (2) more repairs of vehicles, as a more labour intensive option than making new vehicles and less easily automated; (3) transfer to genuinely environmentally sustainable energy projects – as engineers, managers, electricians, etc.; (4) producing for shared cars – car clubs and taxis; (5) using their skills for innovating new transport technologies; (6) innovating for safety improvements – including reducing pollution and accidents; (7) jobs in vehicle production for mass transit – buses, trains, cable cars. Since many in Mexico and the Global South cannot afford EVs, this could provide even more employment than producing individual private cars.

Among the discussions, the workers emphasised that these changes would need to go hand in hand with secure contracts and improvements in pay and conditions. They were

also interested in any global funding and investments that may become available under JT. The idea that greater equality between the Global North and South needs to be part of the JT package for any of this to be feasible was also proposed and generally supported. In general, there was a lot of support for thinking about JT holistically, without fixating on technical solutions, such as EVs. These discussions may not reflect the formal positions of the unions present on JT as these are, as yet, undeveloped. However, they indicate the scope for engaging in these awkward but necessary conversations where immediate personal interests might seem to be threatened. Undoubtedly, most of the work of challenging an EV-dependent transition needs to happen in the Global North, but this scenario with these Global South unions indicates some of the common JT issues and solutions around which solidarity can be built.

Conclusion – beyond green colonialism

This paper has discussed how some interpretations of JT could mirror historical colonial practices, with powerful entities from the Global North exerting dominance and control over the natural resources and territories of the Global South. The case of lithium in Mexico could become an example of such a dynamic. The projected expansion in the sales of EVs and the associated extraction and processing of lithium have raised a number of concerns regarding ecological and human health and livelihood risks in the Global South.

There are numerous ways of transitioning to sustainability but the current and hegemonic focus of much of JT discourse is focused on new technologies, rather than reorganisation of society. Life Cycle Assessments of ICEVs tend to be made in comparison to EVs, rather than societal alternatives, such as free and efficient public transport; appropriate spatial planning, including '15-minute neighbourhoods'; and incentivising active mobility (walking and cycling). These alternatives are not being as actively pursued but have been supported by some labour organisations. For example, the ILO has said 'Although in the future there may be progress with the development and affordability of electric cars, to reduce the social and ecological impact of the sector, a major transformation is needed, consisting mainly of moving users of private cars to public transport (ILO, 2020, p. 31). It would also be possible to focus the EV switch on the electrification of shared cars and taxis as these have a much higher utilisation ratio than the average private car.

A more transformative JT would entail building solidarity with, and including the perspectives of, workers in the Global South. But, to what extent will workers of the Global North and South want and be prepared to form bonds of solidarity around the struggle for JT? It might be assumed that most workers would be more interested in their own workplace issues in the transition to sustainability – maintaining their livelihood, pay, conditions, status, etc. National differences in environmental and labour law may impede cooperation. Some suggestions have been made regarding how this might work. For example, Stevis and Boswell (2007) and Pulignano (2007) highlight the difficulties trade unions face in carrying out effective campaigns of global scope and consider that an international organising body is necessary. Some have also argued that trade union internationalism can be built through enhancing rank-and-file democracy (e.g. Fox-Hodess, 2020). Additionally, Hyman (2005, p. 150) considers there needs to be a mix of top-

down and bottom-up approaches for effective global unionism, urging that: 'It is necessary to build on the resources, historical understanding and strategic capacity of 'bureaucratic' union organisation while also cultivating the initiative and flexibility of grassroots initiative'. Dufour Poirier and Hennebert (2015), examining how collective union action is constructed across borders, found it important to have a long-term presence of key players who can help to frame the issues over time. They also underline how important it is for the unions involved to define a mobilising joint project that will help foster a common sense of belonging. Furthermore, Furukawa Marques and Lagier (2022) argue that contemporary internationalism is a more horizontal method of organising, with a greater diversity of tactics and methods and with a wider focus, including the environment. They give the example of the Landless Workers' Movement (MST) in Brazil as a different form of internationalism using educational spaces to develop an internationalist political culture around cooperation, respect for diversity, mutual aid and solidarity.

Drawing on these suggestions, as well as learning from the wider literature and recent discussions in Mexico, I propose that the labour transnationalism necessary for a de-colonised JT will involve the following steps:

Firstly, it will require developing connections. This will mean educating and raising awareness about JT so that workers and communities in the Global North and South understand the opportunities and challenges of this transition. It will require organising inclusive JT dialogue, locally, nationally and trans-nationally, including all those that are, or could be, impacted by transition decisions. During this dialogue it will be important to strongly emphasise the interconnections in striving for JT – how changes in one location, will impact on others. Moreover, it will mean forming alliances between workers and civil society organisations around a common vision of a transformative JT.

Secondly, working as a connected community, it will be important to identify potential or actual adverse impacts on health, human rights and the environment created by current production practices as well as those relating to the switch to EVs and other transition technologies and processes. This connected community will then need to ensure that companies take appropriate action to prevent and mitigate health, wellbeing and environmental risks wherever they occur.

Thirdly, this alliance of workers and communities will need to demand JT policies and laws which explicitly address social disparities, especially in terms of Global North-Global South inequities. This should include promoting and ensuring ethical supply chains that include fair wages, safe working conditions, the right to collective bargaining, and protection from discrimination and exploitation. Part of this will mean establishing transparency and accountability across the supply chain.

In addition, this transformative international community will push for fair payment for resources and labour, combined with tax justice so that the extracting companies pay an adequate amount to the state at the sites of extraction, processing and production. At the state level, it will demand reparations through a Global JT Fund for historical climate and other environmental damage, and the exploitation of natural resources in the Global South.

Finally, there will be a need to limit, through regulation, the most unsustainable consumption and production patterns, wherever they occur. The EEB (2023b, p. 6) has highlighted the need to consider '… the nuanced differences between societal essential needs and fabricated societal wants' created by the advertising industries. This will

focus the transition on reorganising our societies, rather than new technologies based on further extractivism. The priorities and goals for making this shift will mean social dialogue with workers and communities about what is considered to be socially useful production.

Genuine global solidarity and a JT will mean embracing this radical agenda for change. Trade unions can lead on alerting and mobilising the public and labour movement to the potential and pitfalls of JT. They can build solidarity, strengthening connections across borders through global campaigns; joint education initiatives; exchange visits; and engaging with global labour networking organisations, such as the ILO, GUFs and the International Trade Union Confederation (ITUC).

It is important not to reproduce or worsen global inequities and injustices in the JT endeavour. This paper focuses attention on some potentially problematic aspects of a narrow conception of JT, as a largely technical and nationalistic project. It highlights the neo-colonial potential of JT when not connecting with a deeper critique of societal injustices. The informal discussions with workers in Mexico described here indicates the value of dialogue with the relevant workers and of cross-border communication. Much creativity, empathy and cooperation are unleashed in this process. However, while we may have good ideas and know what needs to change in society, for many workers, the everyday struggle to survive will dominate. Hence, while I have made suggestions as to some of the ways colonial versions of JT might be avoided, there is much more to discuss and research in this area. Keeping in mind the interconnectedness of us all and having the courage to challenge the economic system that thrives on dividing us will be some of the biggest hurdles to overcome.

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