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## Collective psychological ownership as a new angle for understanding group dynamics

Borja Martinović and Maykel Verkuyten

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### ABSTRACT

Even without legal ownership, groups can experience objects, places, and ideas as belonging to them ('ours'). This state of mind—collective psychological ownership—is understudied in social psychology, yet it is central to many intergroup conflicts and stewardship behaviour. We discuss our research on the psychological processes and social-psychological implications of collective psychological ownership. We studied territorial ownership, in different parts of the world and at different geographical levels, offering not only a cross-national but also conceptual replication of the processes. Our findings show that collective psychological ownership is inferred based on primo-occupancy, investment, and formation. Further, we demonstrate that collective psychological ownership can have positive intragroup and negative intergroup outcomes, which are guided by perceived group responsibility and exclusive determination right. We then discuss ownership threat (losing what is 'ours'), and we consider the role of group identification in ownership-related processes. We conclude by providing directions for future research.

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There is an enduring conflict between the state of Israel and the Negev Bedouin community over ownership of the land. This led in the beginning of 2022 to protests whereby Bedouin demonstrators were arrested and both demonstrators and Israeli military were wounded. The Israeli state wants to plant trees to develop the southern part of the Negev desert while the Bedouin protestors consider the territory theirs: “The state does not

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recognise that the land is ours, but we refuse to give up” (Aziz al-Touri, Bedouin spokesperson). However, legally the land belongs to the Israeli state and the claims of the Bedouin have not been recognised (“The land is owned by the state, let that be clear”; spokesperson of Jewish National Fund).

As this example shows, societies function around claims and understandings of ownership, as ownership organises the physical and symbolic environment and defines expectations, rights, and responsibilities that shape social interactions and relationships (Verkuyten & Martinović, 2017). The right to property is recognised in Article 17 of the Universal Declaration of Human Rights, but even without being the legal owner, individuals and groups can have the feeling that something is theirs. Ownership involves a sense of exclusive control over what is (perceived to be) owned, structures social situations, and defines social relationships in terms of who does, and who does not, have the right to use, change, give away, exploit, or sell the things that are owned (Blumenthal, 2010).

People can feel that something belongs to them personally (“mine”), but also that particular things belong to their ingroup (“ours”, Furby, 1980). This latter feeling is labelled collective psychological ownership (CPO; Pierce & Jussila, 2011; Verkuyten & Martinović, 2017) and can be experienced in relation to various targets, such as cultural traditions and artefacts, material symbols (e.g., buildings, statues), historical narratives, and territories. For instance, the notion of cultural appropriation is based on a sense of group ownership of a culture (Strang & Busse, 2020). Similarly, countries claim property rights and increasingly call for the return of objects of art stolen during colonialism. In relation to territory, groups can claim to be the first occupants and there are fears of invasion, intrusion, and trespassing that involve a sense of “our” place. Concerns about place ownership are evident in colonial settler societies where Indigenous Peoples continue to fight for the restitution of their original homelands, but also in societies with ongoing or recent territorial conflicts, such as Kosovo and Israel/Palestine, and in nation states that are facing increasing immigration.

Yet, a sense of collective ownership has received very little attention in intergroup research. There is a large social psychological literature on social categorisation with the related “us-them” thinking, but hardly any systematic theorising and research on the nature and implications of thinking in terms of “ours” (Verkuyten & Martinović, 2017). This is unfortunate because feelings of collective ownership can be a major source of exclusionary behaviour, intergroup tensions, and territorial disputes and conflicts (Toft, 2014), with territorial issues having dominated warfare for over 350 years (Vasquez, 1995). At the same time, the perception of collective ownership can also involve a sense of group responsibility for taking care of what is “ours” with the related intragroup processes of cooperation, solidarity,

stewardship behaviour, and crime prevention (Pierce & Jussila, 2011; Wortley & McFarlane, 2011).

In this review article, we discuss our research on collective psychological ownership, perceived rights and responsibilities that accompany it, as well as intergroup and intragroup outcomes, in order to provide a comprehensive picture of the diverse implications of ownership for group dynamics. Importantly, our research focuses on shared territories such as “our” country, “our” neighbourhood, and “our” park. These territories are targets of collective psychological ownership (“ours”) because it is highly unlikely that people have the feeling that they personally own the country, neighbourhood, or local park (“mine”). Although the important role that property and territoriality plays in people’s thinking, feeling, and doing has been recognised in psychology for quite some time (Beaglehole, 1931; Dittmar, 1992; Edney, 1974) and constitutes a research topic in organisational and social sciences (e.g., G. Brown et al., 2005; Carruthers & Ariovich, 2004; Lyman & Scott, 1967; J. Nadler, 2018), there is very little systematic work in social psychology (e.g., McIntyre et al., 2015).

Our empirical evidence comes from different national contexts, including European societies (Great Britain, Netherlands, Turkey), colonial settler societies (Chile, Australia, New Zealand, South Africa), and (post)conflict societies (Kosovo, Cyprus, Israel/Palestine), and we used different quantitative research methods, manipulations, and measures. We relied both on nation-wide survey data and convenience samples, and we focused mostly on ethnic majority members, but in Chile, Kosovo and Israel we also covered the perspective of ethnic minorities (respectively, indigenous Mapuche, Serbs, and Palestinians). Furthermore, we considered territories that have a more direct impact on people (neighbourhood, local park, hang-out place) and those with a broader societal impact, such as regions and countries. Note that in the local settings the ingroup size is much smaller and ingroup members (“co-owners”) likely know each other, whereas a nation is large (i.e., an imagined community) and it is not possible to know all the compatriots. This means that the “we” and “ours” are likely more clearly delineated in local contexts. Yet, nations and national belonging are very important to people, and a sense of country ownership can have important societal consequences. By focusing on these different territories, we examined the robustness and generality of our findings.

We will first discuss the notion of collective psychological ownership and what it involves in terms of rights, and consider territoriality as the expression of ownership towards a place. Subsequently, in separate sections, we will consider three key aspects of collective ownership of territory: *who* is seen as the owner, *why* that group is seen as the owner, and *what* the implications are of collective ownership. The first aspect relates to the question of whether people tend to perceive their ingroup to own a place and additionally also

recognise other groups as (co-)owners of that place. The second aspect involves the general principles that people use for determining collective ownership, and the third aspect concerns the intergroup and intragroup implications of territorial ownership perceptions. Subsequently, we address the importance of perceived ownership threat for intergroup relations. The possibility of loss, theft, or trespassing is intrinsically linked to the notion of ownership and can lead to defensive and exclusionary reactions. Then we will discuss the role of group identification in ownership perceptions and the related intergroup implications. In the last section of the paper we will suggest various directions for future work on collective psychological ownership as a key aspect of group dynamics.

### Collective psychological ownership

The theoretical and empirical literature on the self and on ego-extensions demonstrates that the distinction between “me” and “mine” is often difficult to draw. The self includes the individual’s ego-extensions that are experienced as part of who one is: we are what we own (Hood, 2020). Research on the mere ownership effect (Bialek et al., 2022), the endowment effect (e.g., Gelman et al., 2012), collecting behaviour (Olmsted, 1991), material symbols (Ledgerwood et al., 2007), and tests of object memorability (Cunningham et al., 2008), shows that people have greater preference and liking of objects they possess and that they value these more, compared with identical objects they do not possess. And research suggests that the endowment effect is not due to loss aversion that is induced by the pain of giving something up (Kahneman & Tversky, 1979), but rather by a sense of possession (Morewedge et al., 2009). There tends to be a close (implicit) mental association between what is “me” and that which is “mine”, and between “us” and “ours” (De Dreu & Van Knippenberg, 2005; Ye & Gawronski, 2016).

The experience of possession with its positive (self-)feelings can be socially enacted and actively asserted in a claim of ownership (Rochat, 2014). Ownership is a social normative construct that goes beyond possession or the current physical control over an object. Just as we can own something that we do not have in possession, having something in one’s possession does not have to imply that one owns it, and leasing something as a tenant or licencing its use differs from owning it. Already 4-year-old-children understand that possession feelings and legal ownership are independent and that the one can exist without the other (Cleroux et al., 2022).

It has been proposed that psychological ownership involves implicit intuitive judgements (Morewedge, 2021) that are based on a naïve domain-specific theory about relations between agents and things (Nancekivell et al., 2019) or rather on the interaction between general cognitive systems (Boyer, 2022). Importantly, ownership involves a bundle of rights, such as the right

to hold, occupy, use, and destroy the “owned”, as well as to determine what happens to it, and this includes the gatekeeper right to prevent others from accessing or using it (Merrill, 1998; Snare, 1972). Thus, ownership implies entitlements and rights in relation to others and therefore shapes how people think, feel, and act: it structures relationships between individuals and groups with respect to “objects” (Blumenthal, 2010). Already two-year old children have a basic understanding of ownership (Fasig, 2000), and three and four-year-olds recognise ownership (Kanngiesser et al., 2020), make territory-based inferences of ownership (Goulding & Friedman, 2018), understand some transfers of ownership and ownership rights (Blake & Harris, 2009), and spontaneously reference ownership to explain why it is or is not acceptable for someone to use an object (Nancekivell & Friedman, 2017). Furthermore, control over other’s access to disputed property and territory is a major theme in young children’s conflicts (Ross, 1996).

Collective psychological ownership (“this is ours”) is based on a sense of “us”, as proposed in self-categorisation theory (Turner et al., 1987). According to this theory, people can understand themselves as a unique individual (personal self) and as a member of a group (group self), and these self-understandings are qualitatively different. A psychological change from personal self to group self implies a transformation of self-related terms and concerns: from personal self-esteem to collective self-esteem, personal efficacy to collective efficacy, personal responsibility to collective responsibility, personal interests to collective interests, and from personal ownership to collective ownership. Self-categorisation theory posits that both the content and dynamics of these issues will be different as a function of whether they relate to the personal self or to a group self. Much social psychological research has demonstrated that intergroup relations depend on the group self being salient and relevant and that self-categorisation differs from the degree of group identification (see Cikara & Van Bavel, 2014; Xiao et al., 2016). Whereas collective psychological ownership implies self-categorisation at the group level and the related sense of “us” (identification “as”), it does not require strong attachment and commitment to the group (identification “with”). In various studies we have found that a territorial sense of collective ownership is empirically distinct from ingroup identification and has independent statistical effects on various intergroup outcomes (e.g., Nijs et al., 2021). However, as we shall discuss below, identification can play a role in perceived collective psychological ownership and its intergroup implications.

In our research we have focused on shared territories as the collective targets of ownership: “our” park, neighbourhood, or country that “we” can decide on. The concept of territoriality originated in research on animal behaviour (Edney, 1974), but also human groups claim territories (Dyson-Hudson & Smith, 1978). Territories are inherently social with ownership of

territory involving rights and control over a specific place in relation to outsiders and implying imagined or actual boundaries that can be encroached in different ways (Lyman & Scott, 1967). For example, collective ownership claims of the country are frequently made in the political arena whereby it is argued that “this country is ours” or “we should take back our country” (Nijs et al., 2021). The exposure to another country’s claim to a contested territory leads to negative outgroup attitudes (e.g., Gries & Masui, 2022); newcomers can face hostilities for invading and taking over “our” neighbourhood (e.g., Elias & Scotson, 1965); youth gangs mark (e.g., by spraying graffiti) the local area they control to keep out rivals (e.g., Kintrea et al., 2008); and children convert a site into their own play area, club, or hideaway, and exclude or punish intruders for invading “our” play area (e.g., O’Neal et al., 1977).

A sense of territorial ownership differs from place attachment as the affective bond that people have with specific areas in which they feel comfortable and safe (Hidalgo & Hernández, 2001). People feel attached to all sorts of places (“here is where I belong”) but ownership implies control-oriented feelings and a sense of proprietary entitlement that is established and maintained in relation to others (“This is our neighbourhood and not yours”). We have found in various studies that collective psychological ownership and place attachment are empirically distinct constructs and that only ownership and not place attachment is negatively related to intergroup outcomes (Nijs et al., 2021; Storz et al., 2020; Toruńczyk-Ruiz & Martinović, 2020).

### Who owns the place

When examining collective psychological ownership of territory, a first question is whether people have a sense of collective ownership and how widespread this is. For assessing this, we collected data from random national and convenience samples in different national settings (Table 1<sup>1</sup>), mostly focusing on ethnic majorities. We used direct questions (7-point Likert scales) to measure perceived ingroup ownership of the territory. In colonial settler societies and conflict areas we also assessed perceived outgroup ownership (Indigenous Peoples and rival outgroup, respectively), e.g., “In your opinion, how much does the land from the Jordan River to the Mediterranean Sea belong to Jews/Palestinians?”, “To what extent do you consider Jews/Palestinians as the rightful owner of this land?”, “How strongly would you say that Jews/Palestinians have the right to claim this land for themselves?”.

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<sup>1</sup>Note that Table 1 only includes studies on collective psychological ownership and collective ownership threat. Studies on autochthony belief that we also discuss in this review are not included in this table.

**Table 1.** Overview of our studies on collective psychological ownership (CPO) and collective ownership threat (COT).

Participants	N	Sample	Method	Target of ownership	Design	Source
<i>Conflict societies</i>						
Greek Cypriots	135	Student sample	CAWI	Country	Correlational	Storz et al. (2020)
Serbs in Kosovo	129	Student sample	CAWI	Country	Correlational	Storz et al. (2020)
Serbs in Kosovo	200	Random national sample	CAPI	Country	Correlational	Storz, Bilali, et al. (2022)
Serbs in Serbia	437	Student sample	CAWI	Country	Correlational	Storz et al. (2020)
Serbs in Serbia	405	Random national sample	CAPI	Country	Correlational	Storz, Bilali, et al. (2022)
Serbs in Serbia	213	Random national sample	CAPI	Country	Experimental	Storz, Martinović, et al. (2022)
Albanians in Kosovo	390	Random national sample	CAPI	Country	Correlational	Storz, Bilali, et al. (2022)
Albanians in Kosovo	162	Random national sample	CAPI	Country	Experimental	Storz, Martinović, et al. (2022)
Israeli Jews	109	Student sample	CAWI	Country	Correlational	Storz et al. (2020)
Israeli Jews	609	Nation-wide sample	CAWI	Land <sup>a</sup>	Correlational	Storz, Bilali, et al. (2022)
Israeli Jews	1268	Nation-wide sample	CAWI	Land <sup>a</sup>	Correlational	Storz, Martinović, et al. (2022)
Israeli Jews	511	Nation-wide sample	CAWI	Land <sup>a</sup>	Correlational	Warnke et al. (2023)
Palestinian citizens of Israel	602	Nation-wide sample	CAWI	Land <sup>a</sup>	Correlational	Warnke et al. (2023)
<i>Settler societies</i>						
Non-indigenous Chileans	121	Community sample	PAPI	Region	Correlational	Nooitgedagt, Figueiredo, et al. (2021)
Indigenous Mapuche	226	Community sample	PAPI	Region	Correlational	Nooitgedagt, Figueiredo, et al. (2021)
Anglo-Celtic Australians	475	Nation-wide sample	CAWI	Country	Correlational	Nooitgedagt et al. (2022)
White South Africans	879	Student sample	CAWI	Country	Correlational	Nooitgedagt et al. (2022)
New Zealand Europeans	755	Nation-wide sample	CAWI	Country	Correlational	Nooitgedagt et al. (2023)
<i>Non-settler societies</i>						
Dutch	572	Nation-wide sample	CAWI	Country	Correlational	Nijs et al. (2021)
Dutch	227	Highschool pupils	PAPI	Hang-out place	Experimental	Nijs, Verkuyten, et al. (2022)
Dutch	338	Nation-wide sample	CAWI	Country	Experimental	Nijs, Verkuyten, et al. (2022)

(Continued)



**Table 1.** (Continued).

Participants	N	Sample	Method	Target of ownership	Design	Source
Dutch	617	Nation-wide sample	CAWI	Country	Correlational	Nijs, Martinović, et al. (2022)
Dutch	784	Nation-wide sample	CAWI	Neighbourhood	Correlational	Nijs, Martinović, et al. (2022)
Dutch	384	Nation-wide sample	CAWI	Park	Experimental	Nijs, Martinović, et al. (2022)
Dutch	502	Nation-wide sample	CAWI	Park	Experimental	Nijs, Martinović, et al. (2022)
Dutch	272	Primary school pupils	PAPI	Island	Experimental	Verkuyten, Sierksma, and Martinović (2015)
Dutch	99	Primary school pupils	PAPI	Island	Experimental	Verkuyten, Sierksma, and Martinović (2015)
Dutch	147	Primary school pupils	PAPI	Island	Experimental	Verkuyten, Sierksma, and Martinović (2015)
Dutch	149	Primary school pupils	PAPI	Island	Experimental	Verkuyten, Sierksma, and Martinović (2015)
Brits	495	Nation-wide sample	CAWI	Country	Correlational	Nijs et al. (2021)
Brits	1005	Nation-wide sample	CAWI	Neighbourhood	Correlational	Toruńczyk-Ruiz and Martinović (2020)
Turks	241	Community sample	CAWI	Country	Correlational	Bagci et al. (2022)
Turks	1003	Community sample	CAPi	Neighbourhood	Correlational	Bagci et al. (2022)
Turks	201	Community sample	CAPi	Neighbourhood	Experimental	Bagci et al. (2022)
Turks	153	Community sample	CAWI	Neighbourhood	Experimental	Bagci et al. (2022)

Note: CAPi = Computer Assisted Personal Interviewing; CAWI = Computer Assisted Web Interviewing; PAPI = Paper and Pencil Interviewing.

<sup>a</sup>Land refers to the land between the Jordan river and the Mediterranean sea.

Table 2 shows the average scores for and the correlations between perceived ingroup and outgroup ownership. In all national contexts the ingroup score is above the neutral mid-point of the scale, indicating that people have a sense of collective ownership, and this is more strongly so in conflict settings. In these settings perceived ownership of the rival outgroup is rather low and also negatively associated with ingroup ownership, indicating a zero-sum orientation. In contrast, in colonial settler societies, White's perceptions of Indigenous Peoples' land ownership are relatively high and positively associated with ingroup ownership suggesting the possibility of

**Table 2.** Average ingroup and outgroup territorial ownership scores and correlations across national contexts: an overview based on a selection of our cross-sectional survey studies with nationally diverse samples.

	Ingroup ownership	Outgroup ownership	Inter-corr.	Source
<b>Conflict societies</b>				
Kosovo Albanians	6.62 (0.89)	1.96 (1.11)	-.21**	Storz, Martinović, et al. (2022)
Kosovo Serbs	6.60 (0.79)	2.15 (1.10)	-.46***	Storz, Martinović, et al. (2022)
Serbs in Serbia	5.99 (1.17)	2.74 (1.67)	-.60***	Storz, Martinović, et al. (2022)
Israeli Jews	6.42 (1.01)	2.33 (1.45)	-.46***	Warnke et al. (2023)
Palestinian citizens of Israel	4.90 (1.83)	3.74 (1.63)	-.19**	Warnke et al. (2023)
Greek Cypriots <sup>a</sup>	5.07 (1.69)	-	-	Storz et al. (2020)
<b>Settler societies</b>				
Non-indigenous Chileans <sup>b</sup>	-	3.50 (0.77)	-	Nooitgedagt, Figueiredo, et al. (2021)
Indigenous Mapuche <sup>b</sup>	4.23 (1.11)	-	-	Nooitgedagt, Figueiredo, et al. (2021)
Anglo-Celtic Australians	4.49 (1.43)	5.28 (1.27)	.12	Nooitgedagt et al. (2022)
White South Africans	4.35 (1.58)	4.42 (1.56)	.90***	Nooitgedagt et al. (2022)
New Zealand Europeans	4.36 (1.55)	4.37 (1.65)	.50***	Nooitgedagt et al. (2023)
<b>Non-settler societies</b>				
Dutch	4.87 (1.43)	-	-	Nijs, Martinović, et al. (2022)
Dutch <sup>c</sup>	4.91 (1.46)	-	-	Nijs, Martinović, et al. (2022)
Brits	5.05 (1.58)	-	-	Nijs et al. (2021)
Brits <sup>c</sup>	4.42 (1.33)	-	-	Toruńczyk-Ruiz and Martinović (2020)

Ownership beliefs were measured with reference to the country as a whole using a 7-point scale with a higher score standing for stronger ownership beliefs.

<sup>a</sup>This score is based on a student sample because we do not have representative data from Cyprus.

<sup>b</sup>In Chile we measured perceived indigenous ownership relative to non-indigenous ownership and with reference to a specific region (Araucanía) using a 5-point scale (1 = completely belongs to non-indigenous Chileans, 5 = completely belongs to Mapuche).

<sup>c</sup>This score refers to collective ownership of the neighbourhood instead of the country.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$ .

shared ownership. These findings show that ownership beliefs reflect the intergroup context in which people find themselves in.

We further examined these ownership perceptions using a person-centred approach (Latent Profile Analysis). This approach makes it possible to determine whether the perceptions of ingroup and outgroup ownership are psychologically combined in different ways by different subgroups of individuals (Osborne & Sibley, 2017). Among New Zealand Europeans we found four different subgroups (Nooitgedagt et al., 2023): two subgroups that primarily perceived *ingroup ownership* (8.4%) or primarily *outgroup ownership* (6.4%), one subgroup that believed that the territory belonged to neither group (9.4%) and a large subgroup (75.9%) that believed that the territory belonged to both New Zealand Europeans and Māori (“*shared ownership*”). The high proportion of this latter subgroup reflects that

New Zealand is in many ways a bicultural nation, and resonates with the finding that many New Zealand Europeans explicitly rate their ingroup and Māori as equal contributors to New Zealand's national identity and culture (Sibley & Liu, 2007).

We used the same approach in the conflict context of Israel/Palestine, but we found different profiles (Warnke et al., 2023). Among Jewish participants we identified two subgroups, with 87% in the ingroup ownership profile and only 13% in the shared ownership profile. For Palestinian citizens of Israel (PCI), a minority group, we found four profiles. In contrast to Jews, most PCI perceived shared ownership (54%, note that this profile was further divided into high shared and moderate shared ownership), whereas only a third perceived exclusive ingroup ownership (36%). Interestingly, we also identified a profile with exclusive outgroup ownership (10%), but no “no ownership” profile. These findings show that understandings of ownership can differ not only across countries but also among ethnic groups living in the same country.

### **Principles of ownership: Why a group is perceived as the owner**

A sense of collective ownership can be based on different general principles (Verkuyten & Martinović, 2017), which implies different understandings of why groups are considered to own particular territories. Historically, when conquistadors and colonists claimed “new” territories for themselves, they carefully tried to establish the moral and legal legitimacy of their occupation and ownership of the new lands. To justify colonial appropriation, they argued, for example, that the land was vacant when they arrived (“empty land”), belonged to no one (“terra nullius”), or that Indigenous Peoples could not own the land because they did not cultivate it (Crais, 1991; Short, 2003). In our research we mostly focused on autochthony (first arrival or primo-occupancy) as a main principle for inferring and claiming collective ownership of land, but we also considered the principles of investment (e.g., working the land), and formation (primacy of the territory in forming the collective identity). Table 3 lists the measures that we used to capture these three principles.

#### ***Autochthony principle***

Words such as “Indigenous”, “sons of the soil” and “First Nation” are generally used to refer to the earliest known inhabitants of territories (Ojong, 2020). People tend to see the original occupants as owning the land because they were “there first”. In political theory, the term “historical right” refers to the right to a piece of land because of first occupancy (Gans, 2001; Murphy, 1990). In the anthropological literature, the general

**Table 3.** The measures of autochthony, investment, and formation beliefs.**Autochthony belief** (*ownership inferred from primo-occupancy of the land*)

Every territory belongs primarily to its first inhabitants.

Those who arrived first in a territory can be considered to own it more.

“We were here first” is a good argument for determining who owns the territory.

**Investment belief** (*ownership inferred from developing the land*)

A territory primarily belongs to the people who made it prosper.

The ones who developed the territory can be seen as its rightful owners.

“We made the territory into what it is today” is a good argument for determining who owns the territory.

**Formation belief** (*ownership inferred from primacy of the territory in forming the collective identity*)

A territory primarily belongs to the people who were shaped by it into who they are today.

A territory belongs to those whose identity is most connected to it.

“This territory has made us into who we are” is a good argument for determining who owns the territory.

Note: Taken from Nooitgedagt et al. (2022).

belief in ownership based on primo-occupancy is called autochthony and is considered one of the most self-evident and “natural” ways of inferring and claiming territorial ownership (Ceuppens & Geschiere, 2005; Geschiere, 2009). Research on autochthony (Geschiere, 2009) and “sons of the soil” conflicts (Côté & Mitchell, 2017; Fearon & Laitin, 2011) demonstrates that primo-occupants are generally considered as rightfully possessing an area. This is evident in the successful moral and legal claims on the restitution of Indigenous lands and the rights associated with the land.

People have been found to judge that an object belongs to the first person possessing it (Blake & Harris, 2009; Friedman & Neary, 2008). For example, older children and adults argue that the first person seen to possess a previously non-owned object is its owner (Friedman, 2008; Friedman & Neary, 2008), and the same has been found for the ownership of ideas (Shaw et al., 2012). Similarly, arriving first at a particular place may be information that people use to infer ownership. First arrival indicates one’s presence at a place before anyone else and this in itself might be an important basis for establishing ownership.

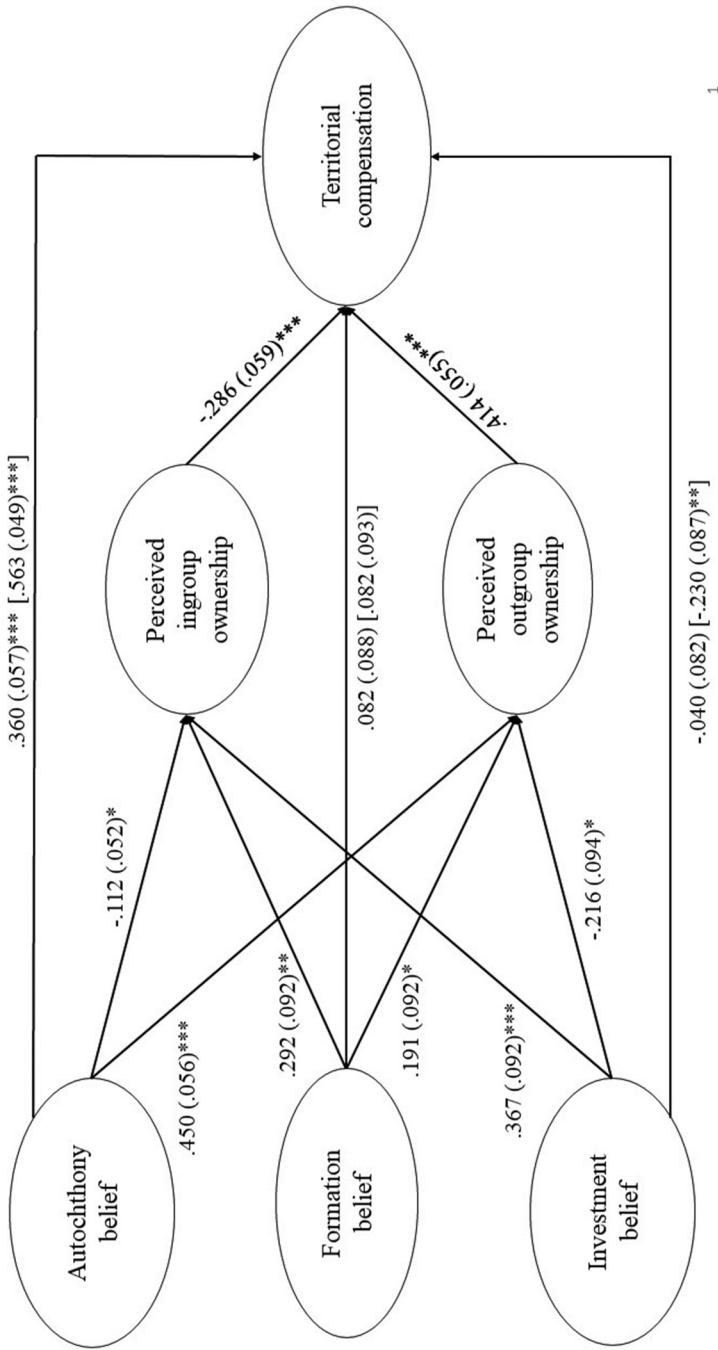
We examined this proposition in a series of experimental studies among early adolescents (9–12 years) and in reference to fictitious land. We demonstrated that children infer personal (“mine”, Verkuyten, Sierksma, & Thijs, 2015) and, importantly, also collective (“ours”) territorial ownership from first arrival (Verkuyten, Sierksma, & Martinović, 2015). Regarding collective ownership, we found that children indicated that a group owns an island relatively more than another group when described as being present on the island first or as being the first group to have lived on the island (versus not first; experiments 1 and 2). Furthermore, first comers were considered to own the land more, independently of whether the second group joined or succeeded them in living on the island (experiment 3; 58.8% indicated that

the island belonged more to the first arriving group, and 39.9% saw the island as belonging to both groups), and independently of the duration of stay of the first comers before being joined by the second group (experiment 4). The effect sizes in the four experiments were substantial ( $.50 < d < .94$ ).

The island study was based on a fictitious territory, but autochthony concerns also matter in real life settings. In European societies, members of the dominant group may feel that their group owns the territory because they were there first, but in colonial settler societies there are groups with different histories of arrival and people will tend to recognise that Indigenous Peoples arrived first. In our research we have argued and shown that not only the actual order of arrival (i.e., who is autochthonous to the land in question and who is not) but also people's endorsement of autochthony as a general principle of ownership (i.e., autochthony belief), matters for ownership inferences. We proposed that in colonial settler societies, stronger autochthony belief should undermine perceptions of colonial settlers' territorial ownership and go hand in hand with higher perceptions of Indigenous ownership. We measured autochthony belief independently of the particular group context (e.g., "Every territory belongs primarily to its first inhabitants"). In our research in Chile, we found that endorsement of the autochthony belief by the White majority as well as the indigenous Mapuche was related to seeing Mapuche as owning the land relatively more,  $\beta_s \sim .25$ ,  $p_s < .001$  (Nooitgedagt, Figueiredo, et al., 2021). In a further study among Whites in the contexts of Australia and South Africa we examined how autochthony belief relates to ingroup and outgroup ownership separately (Nooitgedagt et al., 2022), and we also took the endorsement of the investment and formation principles for ownership (see below) into account. As expected, we found that higher endorsement of autochthony belief was related to higher perceived outgroup (Indigenous) ownership (in both countries) and lower ingroup (non-Indigenous) ownership (only in Australia). The top left hand side of [Figure 1](#) shows the standardised coefficients for the Australian context.

### **Investment principle**

Apart from first possession, creating an object or investing time, effort, and resources into changing and developing it, is also an important general principle for inferring and claiming ownership. Experimental studies have shown that past investment in an object provides a justification for ownership (Beggan & Brown, 1994). Furthermore, research among children from seven different cultures confirmed that already at the age of 5 children attributed ownership of an object to the agent who created it (Rochat et al., 2014), and studies from the UK and Japan show that children and adults alike base ownership decisions on creative labour (Kanngiesser et al., 2014).



**Figure 1.** Structural equation model for the Australian context, with standardised coefficients; Adjusted from Study 1 in Nootigedagt et al. (2022). Note: The total effects of autochthony, formation, and investment belief are displayed between square brackets. \*  $p < .1$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$  (2-tailed). Residual covariance between the latent mediators was accounted for,  $\beta = .239, p < .001$ .

It has also been shown that preschoolers and adults transfer ownership from the owner of raw materials to the one who invests effort to create a new object (Kanngiesser et al., 2010). Additionally, in four experiments among adults it was found that a person who has created an object is considered to own it, especially when the creation was intentional (Levene et al., 2015). This effect was found even when controlling for other factors typically associated with ownership such as physical possession.

The investment principle also applies to land ownership. In our experimental research among early adolescents and in relation to fictitious land, we found stronger effects on ownership for the first comers when that group was presented as having *lived* there first (which implies settlement and working the land) as opposed to simply arriving there first,  $d = .65$  and  $d = .50$ , respectively (Verkuyten, Sierksma, & Martinović, 2015; Experiments 1 and 2). In relation to real territories, there are many examples of investment being used to claim territorial ownership, and colonial settler societies, where Indigenous Peoples were considered part of the land but not as owing it, are a prime example. Based on John Locke's "Second treatise of Government", ownership of land was considered to originate from (long-term) cultivation of the land and, because the colonisers claimed that Indigenous Peoples did not cultivate the lands, they argued that Indigenous Peoples also did not own it ("the agriculture argument"). Thus, in colonial settler societies Whites are likely to recognise that Indigenous Peoples arrived first but can simultaneously claim that their ingroup has invested more and therefore owns the land more.

In our research among Whites in Australia and South Africa we measured endorsement of the investment principle in general terms (e.g., "A territory primarily belongs to the people who made it prosper") and we referred to it as investment belief. Controlling for the endorsement of autochthony and formation principles (Nooitgedagt et al., 2022), we found that stronger investment belief was related to higher perceived ingroup (non-Indigenous) ownership and also lower perceived outgroup (Indigenous) ownership (for standardised coefficients, see bottom left hand side of Figure 1).

### **Formation principle**

The term "historical right" as used in political theory not only refers to first occupancy of a territory but also to the constitutive primacy of the territory in forming the historical identity of the group (Gans, 2001; Murphy, 1990). For example, many Jews do not only claim that they were the first to maintain an organised settlement in Palestine (Eretz Yisrael) but also that the early experiences of the Jews in Palestine were formative in their collective identity. So Jews would have a historical right to the territory not so

much “because they were the first among contemporary peoples to occupy it but rather because it was of primary importance in forming their identity as a historical entity” (Gans, 2001, p. 60). At the same time, the territory is also seen by Palestinians’ as their “homeland” and is thus central to the Palestinians’ collective identity (Pinson, 2008). Similarly, Indigenous Peoples in colonial settler societies perceive their identities as being closely tied to the land (Giguère et al., 2012), but simultaneously, White settlers can feel that the land has played a central role in shaping their collective identity (Verwey & Quayle, 2012).

We have also empirically examined the role of formation belief. Our proposition was that in colonial settler societies, where Indigenous groups are autochthonous and settlers the ones who have developed the country, the principle of formation could instead be used to recognise both groups as owning the land. This is because people could plausibly think that the identities of both Whites and Indigenous Peoples are formed by the land. To test this, in the Australian and South African studies we measured formation belief, that is, the endorsement of the formation principle in general (“A territory primarily belongs to the people who were shaped by it into who they are today”). Taking autochthony and investment beliefs into account, we found that stronger formation belief was indeed associated with both higher perceived outgroup (Indigenous) ownership as well as higher ingroup (non-Indigenous) ownership (for standardised coefficients, see middle of the left-hand side of Figure 1; Nooitgedagt et al., 2022). Thus, formation belief, unlike autochthony and investment beliefs, makes it possible to see both groups as entitled to the land.

### Intergroup implications

Having discussed our findings about the strength of ownership perceptions and the principles behind ownership claims, we now turn to intergroup outcomes of collective psychological ownership. Ownership implies a bundle of rights and a determination and gatekeeper right in particular, also in lay people’s understanding (Furby, 1976). In line with this argument, in two survey studies among Dutch and British national samples we found strong associations ( $r=.64$ , and  $r=.81$ ) between a sense of ingroup ownership of the country and the agreement that one’s ingroup has the exclusive right to determine what happens with the country (Nijs et al., 2021).

The perception that “we” have an exclusive determination right can further lead to the behavioural tendency to exclude outsiders, and this is because collective psychological ownership implies group boundaries between owners and non-owners. Established inhabitants might perceive themselves to be the rightful owners of a territory and therefore to be entitled to exclude outsiders, such as minorities and international



migrants or those not living in “our” neighbourhood. Thus, exclusion of outsiders from “our” territory need not be considered a discriminatory act but can be argued, through ownership rhetoric, to be a self-evident consequence of the exclusive determination right (Verkuyten & Martinović, 2017).

Legal scholars have shown that notions of territorialism and exclusive ownership of land have been interwoven in nationalist narratives in favour of immigration restrictions (Kostakopoulou & Thomas, 2004). Furthermore, Brylka et al. (2015) have found that collective psychological ownership of Finns is related to more negative attitudes towards Russian-speaking immigrants. And in the context of protests by an outgroup, Selvanathan et al. (2021) have shown among Malays, White Americans, and White Australians, that ingroup ownership claims are related to counter-protests to defend the status quo. In our research in European immigrant-receiving countries we systematically examined the importance of collective psychological ownership for attitudes towards outsiders and newcomers. In these studies we focused on different local (neighbourhood, park) and national contexts (country) and found that stronger endorsement of collective ownership, or of autochthony belief as a key principle of ownership (see also Gattino et al., 2019), is associated with more negative outgroup attitudes.

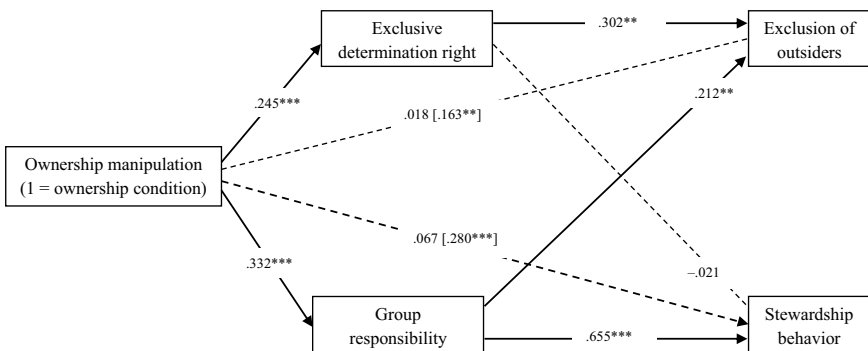
Starting with our research on autochthony, in three studies among Dutch early adolescents, stronger endorsement of autochthony belief was independently associated with more negative attitudes towards immigrants and refugees,  $\beta_s \sim -.33$ ,  $p_s < .001$ . This finding was robust across different attitude measures, and across gender, age, immigrant target group, ethnic identification, perceived multicultural education, and classroom composition (Verkuyten & Thijs, 2019). Similarly, in two studies among Dutch adults, autochthony belief was positively ( $r = .43$  and  $.51$ ) and significantly related to more negative attitudes towards immigrants (Martinović & Verkuyten, 2013). In another study among nationwide samples of Dutch and British adults, we found autochthony belief, after ethnic threat, to be the second strongest predictor ( $\beta \sim .180$  in both countries) of welfare chauvinism (immigrants being less entitled to welfare benefits; Nijs et al., 2023). And in a study conducted among native majority members from 11 European countries autochthony belief was strongly positively related ( $r = .63$ ) to a stronger willingness to engage in collective action against the arrival of refugees (Hasbún López et al., 2019).

Moving on to our studies on collective psychological ownership, among random national samples of ethnic majority Brits and Dutch we found that stronger endorsement of collective ownership was independently associated with more negative attitudes towards immigrants (Nijs et al., 2021; Toruńczyk-Ruiz & Martinović, 2020), a stronger behavioural tendency to exclude immigrants from one’s country (Nijs, Martinović, et al., 2022), but

also with more opposition for further European integration (Nijs et al., 2021), all  $\beta_s \sim .28$ ,  $p_s < .001$ .

We have also used an experimental design in two studies to determine the causal role of collective psychological ownership for exclusionary behaviour (Nijs, Martinović, et al., 2022). Researchers had previously manipulated individual psychological ownership by asking participants to think of a (nick)name for the target of ownership, by showing signs with personal possessive pronouns, by investing time and energy in it, or by using it (Peck et al., 2020; Preston & Gelman, 2020). For triggering a sense of collective ownership we presented in our studies similar features that people generally use to infer and claim ownership (Verkuyten & Martinović, 2017). Participants were shown a photograph of a little park with a picnic table and were asked to imagine that the park was in their street. They were then randomly assigned to either a collective ownership condition (“our park”) or a control condition. In both experimental studies, participants in the ownership condition had stronger perceptions of exclusive determination right, which in turn was related to higher intentions to exclude outsiders (see top half of Figure 2).

Whereas in Western Europe we focused on attitudes towards immigrants, in conflict areas (Cyprus, Kosovo, Israel) we examined reconciliation intentions and attitudes towards conflict resolution as relevant aspects of intergroup relations. Reconciliation intentions entail that people are willing to forgive and interact with the competing outgroup and start cooperative relations with outgroup members (Bar-Tal & Bennink, 2004; A. Nadler, 2012). Regarding conflict resolution, we focused on agreement with conciliatory policies and joint decision-making. We found that stronger ingroup



**Figure 2.** Standardized coefficients of the path model. Total effects are reported between square brackets. \* $p < .05$ ; \*\* $p < .01$  \*\*\* $p < .001$ ; Study 4 in Nijs, Martinović, et al. (2022).

ownership belief was associated with lower support for reconciliation in the conflict areas that we studied,  $\beta_s \sim -.35$ ,  $p_s < .001$  (Storz et al., 2020). It is difficult to show support for intergroup reconciliation when people believe that mainly the ingroup owns the contested lands. In contrast, outgroup ownership beliefs were related to more support for conciliatory policies,  $\beta = .27$ ,  $p < .001$  (Storz, Martinović, et al., 2022). Similarly, a stronger belief in shared ownership (“this land belongs to both groups”) was found to be associated with a greater willingness to reconcile the conflict (Storz, Martinović, et al., 2022, Study 1) and higher support for joint political decision-making in which the parties work together to resolve issues of conflict,  $\beta_s \sim .48$ ,  $p_s < .001$  (Storz, Bilali, et al., 2022). We have also experimentally manipulated shared ownership (vs ingroup ownership) of Kosovo among Albanians and Serbs (Storz, Martinović, et al., 2022, Study 2). In the shared ownership condition, participants showed significantly higher reconciliation intentions ( $M = 3.71$ ,  $SD = 1.38$ , on a 7-point scale) than those in the ingroup ownership condition ( $M = 3.15$ ,  $SD = 1.44$ ,  $d = 0.4$ ) and this finding was robust across the two ethnic groups.

In our research in colonial settler societies (Australia, Chile, New Zealand, and South Africa) we focused on territorial compensation for Indigenous Peoples. Such compensation can take a more symbolic form (e.g., institutional apologies) or instrumental form (e.g., territorial restitution, financial compensation). In Chile, Australia, and South Africa, we found that White settler endorsement of investment as a general principle of territorial ownership was consistently related to lower support for compensation of Indigenous groups,  $\beta_s \sim -.27$ ,  $p_s < .001$ , and in Australia and South Africa we also found that this was because of higher perceptions of ingroup ownership and lower perceptions of Indigenous ownership (Nooitgedagt et al., 2022; Nooitgedagt, Figueiredo, et al., 2021). Conversely, the endorsement of autochthony (primo-occupancy) played a positive role in attitudes towards reparations for indigenous peoples (Nooitgedagt et al., 2022; Nooitgedagt, Figueiredo, et al., 2021). In each context, White settler endorsement of autochthony belief was consistently related to higher support for territorial compensation for Indigenous People because the latter group was seen as owning the land more and the ingroup as owning it less (see Figure 1). In another research we conducted in Australia, autochthony belief was also related to stronger moral emotions of collective guilt and shame,  $\beta_s \sim .46$ ,  $p_s < .001$ , and indirectly, to more support for reparations (Nooitgedagt, Martinović, et al., 2021).

These findings indicate that majority members oppose compensation if they feel that the land belongs to their settler ingroup, and are in favour of compensation if they think that it belongs to the Indigenous outgroup. In the context of New Zealand and using a person-centred approach, we similarly found that New Zealand Europeans who fell in the “Indigenous ownership”

profile were most supportive of territorial compensation, and those in the “settler ownership” profile were most strongly opposed to it (Nooitgedagt et al., 2023). Additionally, people in the profile high on both settler and Indigenous ownership (i.e., shared ownership) were not supportive of compensation, which indicates that perceiving Indigenous territorial ownership is only associated with support for territorial compensation for those who do not also perceive settler territorial ownership.

## Responsibilities and stewardship behaviour

Taking ownership commonly means taking responsibility, and parents try to teach their children responsible behaviour by making them the owner of things. Experienced responsibility can be an antecedent to a sense of ownership, but felt responsibility is also a consequence of ownership (Cleroux et al., 2022; Peck et al., 2020). What we collectively own can define who we are as a group, and by taking care of what is “ours”, we are taking care of ourselves (Pierce & Jussila, 2011; Verkuyten & Martinović, 2017). Furthermore this general idea that “we should take care of what is ours” might make people feel a moral obligation, as well as perceived normative pressure from fellow co-owners, to take responsibility of what they collectively own.

A sense of collective ownership can, thus, lead to investment of time and energy in maintaining and improving the target of ownership, and can have positive intragroup consequences, such as prosocial behaviour (Jami et al., 2021). Ownership binds people together, increases commitment, stimulates collective action, defines collective responsibilities and works against social loafing and crime. Employee-owned organisations and various initiatives to “give back” the street or neighbourhood to its inhabitants, appeal to the notions of responsibility and commitment that accompany ownership. Being responsible for what is “ours” motivates people to take an active role as “stewards” and act in the best interest of what is collectively owned (Henssen et al., 2014, Hernandez, 2012; Pierce et al., 2017). For example, employees who feel as “owners” of their work are more likely to take up additional tasks and roles (e.g., Van Dyne & Pierce, 2004), and a sense of ownership of public natural areas increases the willingness to protect the area and oppose exploitation (Preston & Gelman, 2020). Additionally, we have found that collective psychological ownership of a neighbourhood is related to higher local participation,  $\beta = .17, p < .001$  (Toruńczyk-Ruiz & Martinović, 2020).

Although in these studies it is argued that the positive association between psychological ownership and stewardship behaviour is due to an increased sense of responsibility, this had not been investigated (but see Peck et al., 2020). We set out to do so in four studies in the Netherlands using cross-sectional data in relation to the country (Study 1) and the neighbourhood

(Study 2), and an experimental design in relation to a local park (Study 3 and 4) (Nijs, Martinović, et al., 2022). We found that collective psychological ownership of the country (Study 1) and of the local neighbourhood (Study 2) went together not only with Dutch people's perceived exclusive determination right,  $\beta_s \sim .44$ ,  $p_s < .001$ , but also with perceived group responsibility,  $\beta_s \sim .31$ ,  $p_s < .001$ . Responsibility, in turn, was related to higher intentions to engage in stewardship behaviour (e.g., volunteer or donate money to support a charity that is committed to maintaining and preserving Dutch natural landscapes),  $\beta_s \sim .35$ ,  $p_s < .01$ . Subsequently, in Studies 3 and 4 we experimentally demonstrated that increasing a sense of collective ownership of an imaginary local park causes a higher sense of group responsibility ("we neighbours are responsible for the park"), and is indirectly related to stronger intentions to engage in stewardship behaviour (e.g., willingness to clean up litter in the park). The findings for Study 4 are shown in the bottom half of [Figure 2](#).

Unexpectedly, we also found in both experimental studies that the exclusion of outsiders was not only increased by a sense of determination right but also by group responsibility (see [Figure 2](#)). Thus, the sense that a local area is "our own" can help to foster responsibility and stewardship behaviour, which can strengthen a local community and can improve the neighbourhood, but might also lead to the intention to mark what is "ours" and to exclude outsiders. This is in line with geography research that in addition to prosocial consequence, points at the exclusionary consequences of shared ownership of community gardens (e.g., Spierings et al., 2018). Residents might worry that outsiders will not take proper care of the park, which is why they feel that it is their responsibility to mark the property and send the outsiders away.

### Ownership threat

An intrinsic part of the sense of ownership is the possibility of losing control and being dispossessed. Theft, trespassing, and occupation (e.g., of Crimea by Russia or of Palestinian territories by Israel) lead to ownership disputes and conflicts. Such challenges or threats to ownership stimulate behaviour to defend and restore one's ownership claims, and this can be done by engaging in anticipatory and reactionary defences (G. Brown, 2009; De Dreu & Van Knippenberg, 2005). Anticipatory defences are meant to prevent infringement attempts by others, such as the setting up of fences and walls (e.g., to keep immigrants from entering the country), use of warning signs and border controls, and the implementation of exclusionary rules and regulations (e.g., voting restrictions). In contrast, reactionary defences are actions taken after an infringement, and their purpose is to reclaim ownership.

One has ownership to the extent that one has control and the right to exclude. The fear of losing exclusive control is referred to as collective ownership threat (COT) in which perceived infringements and the sense of one's exclusive determination right are at stake. This form of threat differs from competition over scarce material and economic resources involved in realistic threat, as well as from symbolic threats to the value and meaning of the ingroup identity. People can fear to lose control over what is theirs, even if they are not concerned with economic competition over scarce resources or the value of their group identity. For example, it has been found that in times of economic prosperity people are less inclined to reason against immigration in terms of economic competition and more in terms of the unfairness of having to share what is "ours" (Jetten et al., 2017). And we have shown that collective ownership threat can be conceptualised and measured as a specific form of threat that uniquely predicts outgroup negativity (Nijs, Verkuyten, et al., 2022).

People can have the feeling that what is "ours" is gradually being taken away from "us" so that "we", as owners, can no longer decide what happens with, for example, "our" country or "our" neighbourhood. According to the group position model (Blumer, 1958), outgroup negativity is especially likely under the condition of encroachment whereby there is a gradual usurpation of our property or entrance upon our territory (Bobo, 1999). In line with this, it was found that Japanese attitudes towards China and South Korea became more negative after Chinese activists landed on an island claimed by Japan (Senkaku/Diaoyu) and after South Korean politicians landed on another disputed island (Takeshima/Dokdo; Igarashi, 2018).

When an encroachment clearly challenges "our" perceived prerogatives or rights, a feeling of indignation and infringement occurs. In a large scale survey among Dutch majority members we found that the endorsement of country ownership based on primo-occupancy (i.e., autochthony belief) was only associated with prejudicial attitudes towards immigrants for those who perceived outgroup encroachment (e.g., "Native Dutch are slowly losing the Netherlands to newcomers"; Martinović & Verkuyten, 2013). Similarly, autochthony belief was related to willingness to protest against the arrival of refugees only among native Europeans with high perceptions of threat (Hasbún López et al., 2019). It is when people have a sense that something is "theirs" and at the same time fear that they are losing their exclusive say about it, that prejudicial attitudes and defensive behaviours are most likely to develop.

In two experimental studies, we further examined the intergroup consequences of collective ownership threat in relation to perceived owned territories at different levels of abstraction, i.e., a local hangout place and a country (Nijs, Verkuyten, et al., 2022). In a first study among adolescents, we experimentally tested whether infringement of a hangout place

owned by a group of friends leads to more perceived collective ownership threat and whether this, in turn, relates to intentions to engage in marking and defending behaviour. We also considered symbolic threat to examine whether the relationship found is specific to collective ownership threat. Participants were randomly assigned to one of the three experimental conditions about an imaginary hangout place: collective ownership threat (another group of youngsters acting like it was their place and wanting to take it over), symbolic threat (other youngsters being dismissive and negative about their ingroup as they found the hangout place childish), and no threat (control) condition. They were then asked how likely it would be that they and their friends would engage in a set of actions (G. Brown et al., 2005), including physical marking (e.g., “Place a sign so it is clear that it is your hangout place”), social marking (e.g., “Always speak of ‘OUR hangout place’”), anticipatory defence (e.g., “Always go to the place as quickly as possible to prevent others from sitting there”), and reactionary defence (e.g., “Ask people to leave when they are sitting at your hangout place”).

We found that collective ownership threat manipulation led to more perceived collective ownership threat compared to the control manipulation,  $\beta = .27$ ,  $p < .001$ , whereas this was not the case for symbolic threat. Furthermore, the manipulation was indirectly related to marking and anticipatory defending behavioural intentions via higher perceived collective ownership threat. However, we found no indirect effect of the collective ownership threatening situation on reactionary defences. People might perceive reactionary defences as a backup plan for when marking and anticipatory defences do not have the anticipated effect. Trying to make others go away could be regarded a rather confrontational strategy that is only necessary when the ownership is already lost and should be reclaimed. Moreover, where adolescents might have been able to imagine responding to the collective ownership threat by physical and social marking and anticipatory defence, they might have found it harder to imagine responding in a rather confrontational manner, by trying to make others go away.

Next to this concrete everyday life context, in a second experimental study, we tested whether similar processes play a role in threat to country ownership among a national sample of participants. We tested whether framing Turkish accession to the EU as an infringement of the collective ownership of the country (i.e., The Netherlands) elicits stronger perceptions of collective ownership threat, and thereby generates more opposition towards Turkish accession. In this study, we also considered symbolic and economic threats to examine the unique contribution of collective ownership threat. In a random design, Turkish accession was framed either as an infringement of the collective ownership of the country (collective ownership threat), as a burden to economic resources (economic threat), or as



conflicting with European culture and identity (symbolic threat). In the control condition, the general EU procedure of accession to the EU, not specifically related to Turkey, was discussed in a neutral way. We found that framing Turkish EU accession as an infringement of the collective ownership of the country led to more perceived collective ownership threat,  $\beta = .14$ ,  $p = .023$  (and not symbolic or economic threat), which was in turn related to more opposition towards Turkey's possible accession,  $\beta = .43$ ,  $p < .001$ .

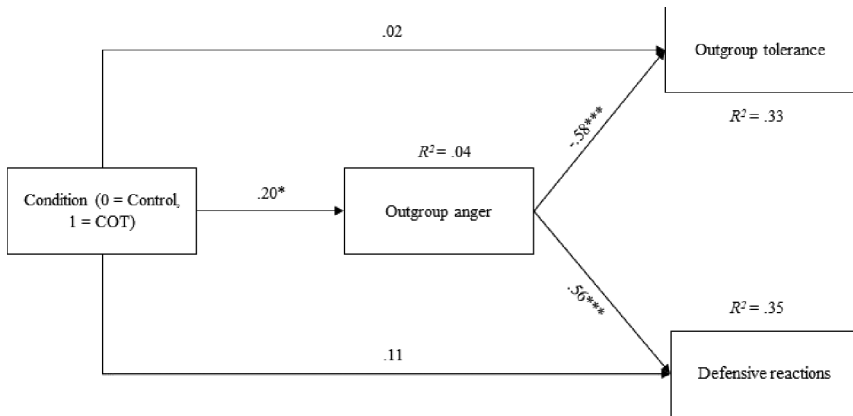
Thus, a situation in which the collective ownership of a country was infringed was indirectly related to more opposition towards the infringer (Turkey) via higher perceived collective ownership threat, but not via perceived economic or symbolic threat.

In an additional set of studies conducted in the context of Syrian refugees in Turkey, we further examined among Turkish people the role of collective ownership threat in relation to outgroup attitudes, and we considered emotions of anger and fear as possible explanatory mechanisms (Bagci et al., 2022). In a first survey study we demonstrated that national-level collective ownership threat ("I fear that our country is less and less owned by us Turks") was associated with stronger anti-immigrant feelings, lower tolerance towards refugees ("Syrian refugees should have the same right as native Turks to protest against the authorities when feeling ill-treated") and lower support for cultural diversity ("The presence of Syrian refugees is good for the society").

We conceptually replicated these findings in a second study that focused on neighbourhood-level ownership threat and included a larger Turkish community sample selected from neighbourhoods that have witnessed a significant level of Syrian intake. Further, we extended our dependent variables to include more specific outcomes of ownership threat such as territorial behaviours (defensive reactions towards infringement), and we focused on the role of anger and fear. We found that collective ownership threat was again related to lower tolerance of refugees and also to stronger territorial behaviours, through increased feelings of anger in particular.

Findings from these Studies 1 and 2 provided evidence for the negative implications of collective ownership threat for intergroup relationships. However, it is possible that collective ownership threat is the by-product of negative intergroup emotions and initial tolerance towards refugees (e.g., Blinder & Lundgren, 2019). In a next step, we therefore tested whether an experimental manipulation of collective ownership threat leads to increased anger with the related attitudinal and behavioural outcomes. In a pilot study participants were asked to describe in 5–6 sentences their thoughts and feelings if their neighbourhood would gradually be taken over by Syrian refugees. We found such manipulation to be effective, as it increased ownership threat among a general community sample. In an experimental study we subsequently found (see [Figure 3](#)) that the experimental ownership threat





**Figure 3.** Path model of collective ownership threat in the Turkish context. Study 3b in Bagci et al. (2022). Notes. Standardized beta coefficients are shown. COT=Collective ownership threat.

condition had the expected effect on outgroup anger ( $d = 0.4$ ), with anger being further associated with lower outgroup tolerance, as well as greater territorial defensive behavioural intentions. Thus, collective ownership threat decreased outgroup tolerance and increased defensiveness via increased anger towards Syrian immigrants. These findings are consistent with empirical literature demonstrating that infringement to personal ownership is associated with defensive behaviours through increased anger (G. Brown & Robinson, 2011). Thus, people’s intolerance of and territorial reactions towards newcomers who can be considered as taking over what is “ours”, are explained by the sense of threat to one’s ownership rights, with the related feelings of anger.

### Ingroup identification

A sense of “us” is a prerequisite to feel that something is “ours”, and many of the findings that we have discussed were obtained while taking the degree of ingroup identification into account statistically. Thus, higher collective psychological ownership with its perceived entitlement goes together with more negative views of outgroups and higher ingroup responsibility independently of ingroup identification (Anastasio & Rose, 2014). However, individuals differ in how strongly they feel attached and committed to their ingroup and this is likely to matter for collective psychological ownership and the endorsement of the principles on which it is based. Stronger ingroup identification means that one tends to be focused on the values and interests of that ingroup, including its rights and entitlements, and tends to justify these

perceived entitlements (Wenzel, 2000). This means that it can be expected that higher ingroup identification is associated with stronger ingroup ownership beliefs. For example, research in Finland, the South of the United States and Canada, found that stronger attachment to the majority ingroup (Finnish, Southerner, Canadian) was related to stronger ingroup ownership beliefs (Brylka et al., 2015; Wright, 2018). And in Italy, stronger local (city) identification has been found to be associated with higher autochthony beliefs, and via those beliefs, to more negative attitudes towards immigrants (Gattino et al., 2019).

In two studies among national samples of Dutch majority members, and controlling for measures of ethnic and civic nationhood, social dominance orientation, authoritarian conformity, deprovincialization, education, and political orientation, we similarly found that higher national identification was associated with stronger endorsement of autochthony, which, in turn, was related to higher prejudice towards migrant groups (all  $\beta_s \sim .48$ ,  $p_s < .001$ ; Martinović & Verkuyten, 2013). Similarly, we found with survey data from 11 European countries that national identification was positively associated with autochthony belief ( $\beta = .23$ ,  $p < .001$ ), and autochthony was in turn associated with the intention to protest against refugees ( $\beta = .14$ ,  $p < .001$ ; Hasbún López et al., 2019). Thus, higher national identifiers in European nation states tend to reject migrant groups because they believe that their ingroup (primo-occupants) is entitled to decide on how the country is being run, and not, for example, because they support the idea that national belonging derives from common ethnicity or because they have a stronger social dominance orientation.

Also in colonial settler societies and territorial conflict regions, people who are more attached to the ingroup might more strongly perceive ingroup entitlements to the contested territory, and thus have stronger beliefs that the ingroup owns the contested territory. In a study in Chile we found that the Indigenous Mapuche's attachment to their group identity was positively correlated with both autochthony belief ( $r = .29$ ) and the perception that the territory belongs to their ingroup ( $r = .40$ ). In contrast, for the non-indigenous majority, ingroup (Chilean) identification was negatively correlated with autochthony belief ( $r = -.19$ ) and perceived indigenous ownership of the land ( $r = -.30$ ; Nooitgedagt, Figueiredo, et al., 2021, Study 2).

In conflict regions we similarly found a positive association between ingroup identification and collective psychological ownership. For example, among samples of Serbs from Serbia and Kosovo, Israeli Jews and Greek Cypriots, those who felt more attached to their ethnic ingroup believed more strongly that the contested territory belongs to their own group, all  $\beta_s \sim .51$ ,  $p_s < .001$  (Storz et al., 2020). However, identification with the ingroup can take different forms and in addition to feeling attached to one's ingroup, one can feel that one's group is superior to other groups, a feeling that is likely to

be common in conflict regions (Roccas et al., 2006). Ingroup superiority provides a further justification for ingroup rights and entitlements, such as ingroup ownership beliefs, but in addition, this justification might be at the expense of an outgroup whereby the outgroup is believed to have less ownership entitlements and rights. Consequently, the feeling of being superior to other groups might be especially relevant for outgroup ownership beliefs, since ingroup superiority is a form of identification that focuses on the ingroup in comparison to outgroups (Roccas et al., 2008). In line with this reasoning we found that the more Israeli Jews felt superior to other groups, the more strongly they believed that the contested territory belongs to their ingroup,  $\beta = .09$ ,  $p = .025$ , and less to Palestinians,  $\beta = -.27$ ,  $p < .001$  (Storz, Bilali, et al., 2022). And in an experimental research in South Korea, Korean ingroup superiority increased anger when exposed to a Chinese claim on a historically contested territory (Goguryeo) and decreased anger when exposed to an ingroup affirmation of Korea's own historical claim (Gries & Masui, 2022).

Higher national identifiers also tend to be more nostalgic about the national past (Smeekes, 2015) and group-based nostalgia has been linked to beliefs about collective psychological ownership and the related entitlements. For instance, ethnographic research by Kasinitz and Hillyard (1995) has described how nostalgia for communal solidarity among working-class White Americans helped them to claim that they, instead of the growing non-White population, represented the authentic voice of the community and were therefore entitled to assert ownership of the neighbourhood. For many people, nationhood is about homeland and being able to decide about homeland affairs. In European societies, feeling nostalgic about our lost national home could make majority members want to restore group boundaries and entitlements based on their status as primo-occupants of the country: or as a slogan of the Dutch populist party PVV states "The Netherlands OURS again" (PVV, 2017).

In a survey study (Smeekes et al., 2015, Study 2), we examined the associations between national nostalgia (e.g., "How often do you experience nostalgia when you think about the Netherlands of the past?", "How often do you long for the good old days of the country?"), autochthony belief, and opposition to Muslim immigrant rights (e.g., "Muslims should have the right to not only celebrate their Islamic holidays at home, but also in public life", "In the Netherlands wearing a headscarf should not be forbidden"). We found that national nostalgia was related to more opposition to Muslim expressive rights via stronger endorsement of autochthony beliefs,  $\beta_{\text{indirect effect}} = .12$ , 95% CI = .055–.212. In a further study we used an experimental design in which national nostalgia was manipulated (Smeekes et al., 2015, Study 3). Participants were randomly assigned to one of two conditions. In the national nostalgia condition, participants first watched a short

nostalgic movie about the good old days in the 1990s, which was the period in which the participants grew up. This was followed by a reading and writing task based on previous manipulations of personal nostalgia (see Iyer & Jetten, 2011). Additionally, we designed a control condition that allowed us to differentiate the effect of national nostalgia on autochthony belief from that of a more general reflection on the national past, as well as from the mere salience of national identity. We found that the salience of national nostalgia increased beliefs in autochthony, which subsequently resulted in stronger opposition to Muslim expressive rights,  $\beta_{\text{indirect effect}} = .07$ , 95% CI = .002–.206.

Stronger national identifiers do not only tend to feel more nostalgic about the national past but also tend to endorse a national identity content that draws relatively strict social boundaries, such as in terms of ethnic belonging (see Martinović & Verkuyten, 2013). Ethnic conceptions of belonging differ from autochthony belief and can be independent of territorial borders, as for example among the Roma or other nomadic people. Whereas ethnicity concerns belonging in terms of common origin and blood ties, autochthony and the related sense of ownership and entitlements define belonging as being historically rooted in place (Geschiere, 2009). However, an appeal to autochthony is particularly likely among high identifiers who endorse an ethnic conception of citizenship. Those who consider national belonging in terms of ancestry and blood are more likely to agree with the notion of ownership based on primo-occupancy and the related entitlements and outgroup implications. Thus, it can be expected that higher support for ethnic citizenship is related to stronger endorsement of autochthony and thereby, for example, to lower acceptance of immigrant rights and immigrants' political participation. In two survey studies conducted among national samples of native Dutch we found that the endorsement of ethnic citizenship was related to lower acceptance of Muslim immigrant rights,  $\beta_{\text{indirect effect}} = -.11$ , 95% CI =  $-.116 - -.063$  (Study 1) and their political participation,  $\beta_{\text{indirect effect}} = -.14$ , 95% CI =  $-.195 - -.082$  (Study 2) via higher adherence to autochthony beliefs (Verkuyten & Martinović, 2015). In contrast, the endorsement of civic citizenship was found to be associated with higher acceptance of Muslim immigrant rights,  $\beta_{\text{indirect effect}} = .04$ , 95% CI =  $.011-.073$ , and their political participation,  $\beta_{\text{indirect effect}} = .06$ , 95% CI =  $.028-.094$ , via lower belief in autochthony.

### Future directions

In addition to reviewing our empirical work on collective psychological ownership, we want to briefly draw attention to three possible directions for further social psychological research to enrich our understanding of the importance of collective psychological ownership for group dynamics.

### *Target of ownership*

Our research focused on collective psychological ownership of territory, which is an important but largely neglected topic in social psychology (Beaglehole, 1931; Edney, 1974). Territorial disputes and conflicts occur in many different settings (international, national, regional, local, institutional, organisational) and tend to have strong negative implications for intergroup relations, including violent conflicts and war (Toft, 2014; Vasquez, 1995). However, a sense of collective ownership can also involve other “objects” such as intellectual property, open-source initiatives, material artefacts, domestic products, and natural resources, as well as more abstract and symbolic things such as cultural narratives, symbols, and group names (e.g., Thom-Santelli et al., 2009). Future research could examine collective psychological ownership and its implications for intergroup relations in relation to these “objects” (e.g., Gineikiene et al., 2017; Ledgerwood et al., 2007).

For example, the notion of cultural appropriation is based on the idea that specific groups own specific cultures and that acts of appropriation implicate cultural thievery and theft, making it necessary to protect the cultural property rights of minorities. And among minorities feelings of minority cultural appropriation are attenuated when outgroup consumers are psychologically invested in traditional cultural products and therefore might be seen more strongly as having some sense of ownership of that product (Finkelstein & Rios, 2022). However, the theoretical and limited empirical work on cultural appropriation has not systematically used the perspective of collective psychological ownership for understanding the sometimes hotly debated issues about cultural entitlements and exploitation (e.g., Mosley & Biernat, 2021).

### *Aspects of ownership*

Ownership implies entitlements, rules, and rights that enable and constrain, which makes it important to investigate how people perceive what may be owned, who can be an owner (e.g., immigrants having limited or full ownership rights), what constitutes acceptable use of property, how property can be transferred, and what the limits are of the gatekeeper right. Furthermore, a territory can be encroached in different ways, such as unwarranted use of a territory (violation), uninvited crossing of a boundary (invasion), and rendering the territory impure (contamination; Lyman & Scott, 1967). Future research could systematically examine different forms of encroachment with the related threats and various anticipatory and reactionary defences. Furthermore, it would be important to find out whether in times of rapid change (influx of newcomers; merger), psychological ownership

elicits negative emotions and intentions to resist change (Cocieru et al., 2019). These are situations where the threat of losing what is “ours” is likely pronounced. Emphasizing some form of shared ownership could be a strategy to reduce feelings of ownership threat and improve intergroup relations, while still equipping people with a sense of ownership. However, such an intervention might not be equally effective in all contexts or for everyone, as narratives of shared ownership can also backfire. In an experimental study in Kosovo (Storz, Martinović, et al., 2022; Study 2) we found that a sizeable share of the participants, after having read the shared ownership narrative, showed reactance and reinstated that Kosovo belonged only to their ingroup. More research is needed on effective ways to reduce ownership threat. Finally, perceived ownership does not only involve rights but also attributed responsibilities, and it would be fruitful to examine when and why owners can be held accountable and responsible for harm caused by what they own, such as environmental waste and pollution (Stonehouse & Friedman, 2022).

### **Cultural differences**

It has been argued that people’s ownership feelings are universally present in all human societies (D. E. Brown, 1991; Ellis, 1985) and might have evolutionary roots or stem from one’s own body awareness. In line with this, we have identified several social psychological processes that hold across countries and groups that we have considered in our research program. However, it would be important to consider other interethnic contexts and examine collective psychological ownership cross-culturally. This is because there are social and cultural factors that have a strong influence on the appreciation and acknowledgement of ownership rights and on what can be owned (Dittmar, 1992). Historically, the idea that land can be individually owned developed differently in different parts of the world (Linklater, 2014), and many Indigenous Peoples have long lived with the conviction that the land did not belong to anyone but was there to be used and taken care of. Research among children also shows that, although 5-to-7-year olds in general respect ownership, there is considerable variation across societies (Kanngiesser et al., 2019). It could be the case that cultures that differ in individualist-collectivist value orientation also have different understandings of ownership, similar to the cultural differences that have been found in the endowment effect (Maddux et al., 2010).

### **Conclusion**

A sense of collective ownership is an inherently social phenomenon because it structures many aspects of people’s daily life, defines rights and responsibilities, and organises social relations. Collective psychological ownership

determines not only the relations between people and objects or places, but also the relations among people with regards to what they (think) they own (Blumenthal, 2010). Whereas philosophers, geographers, anthropologists, and organisational scientist have theorised about and provided empirical evidence on the importance of ownership beliefs, the theoretical and societal importance of collective ownership is largely ignored in social psychology, where the focus is more on people's greater preference and liking of objects they personally possess compared to identical objects they do not possess (e.g., Bialek et al., 2022; Gelman et al., 2012). Yet, the concept of collective ownership is relevant to central social psychological topics, such as group identities, ideologies, perceived entitlements, and intragroup and intergroup attitudes and behaviours.

We have tried to demonstrate the importance of collective psychological ownership for group dynamics in a range of intergroup settings by discussing our research on ownership of territories. As our findings shows, collective psychological ownership of territories can be inferred and claimed based on different principles. Further, such a sense of ownership implies an exclusive determination or "gatekeeper" right that is claimed and marked, but that can also be challenged and threatened, resulting in intergroup conflicts and territorial defences. Collective psychological ownership, simultaneously, also implies a sense of group-based responsibility and can stimulate civic involvement and stewardship behaviours. In our view, social psychological thinking and research, in particular with respect to intergroup conflicts and intragroup solidarity in various local and national setting, would benefit from a more systematic focus on collective psychological ownership.

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### **Availability of data and material & code**

We have made the data and code of our studies discussed in this review article available online on Open Science Framework. Please see the respective publications for the related links to Open Science Framework.

## Ethics approval

Our research line OWNERS has been approved by the Ethics Committee of the Faculty of Social and Behavioural Sciences of Utrecht University (clearance number: FETC18–118).

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