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Post-print: What is there to learn from the Open Gym? Developing new pedagogical notions of sports by an empirical engagement with a DIY sports infrastructure

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Reference (online first): van de Oudeweetering, K., Vanermen, L., Vandenabeele, J., & Decuypere, M. (2022). What is there to learn from the Open Gym? Developing new pedagogical notions of sports by an empirical engagement with a DIY sports infrastructure, *Sport, Education and Society*.

To link to this article: https://doi.org/10.1080/13573322.2022.2027752

ABSTRACT: In this paper, we take an interest in a recently emerged 'DIY sports infrastructure' in a Belgian city: the Open Gym. The purpose of our inquiry is to contribute to the literature regarding sports pedagogy by developing theoretical notions, based on empirical engagements, that render how these kinds of sports infrastructures could make up pedagogical places. This inquiry builds on a pedagogical notion of sports as education about, through, and in movement, and deployed theoretical resources of 'new mobilities' to direct its focus towards bodily movements. The methodology, informed by the idea of an 'ethnographic navigation', involved methods that focused on bodily movements of the researchers and other athletes, and rendered these into descriptive and reflective accounts. These accounts, shown in the findings, present bodily movements as (continuing) attachments, contingencies, and (decentralized) concentrations, resulting from more-or-less solid ties between human bodies and objects, incidental interactions mingling through these ties, and specific ways of coming together by mutual attention. Moreover, the accounts stage the Open Gym as two kinds of places: an interchangeably solid and flowing 'congealed place', and a common ground for action that is 'a platform'. Finally, we introduce the notion of 'learning to navigate' to characterize what makes the Open Gym a pedagogical place. Propositions and questions about the empirical and methodological implications of the findings, and what can be learned from the Open Gym, are discussed.

Keywords: Sports infrastructures; new mobilities; ethnographic accounts; navigation; pedagogical places; attachments; contingencies; platforms

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What is there to learn from the Open Gym? Developing new pedagogical notions of sports by an empirical engagement with a DIY sports infrastructure

Introduction

In this paper, we take an interest in a recently emerged 'DIY sports infrastructure' in a Belgian city: the Open Gym. This infrastructure was initially built by a group of local athletes on an unused piece of land underneath an overpass for trains and, later on, received recognition and support from the municipal government. At the time of the research, the infrastructure featured i.a. climbing walls, calisthenics constructions, weight-lifting equipment, and a boxing ring, all mainly made out of recycled materials. The infrastructure is accessible at any hour of the day but also integrates a lesson program for yoga, strength training, and dancing. A website (http://www.opengym.be) presents a timetable for this lesson program, next to a manual with exemplary exercises, and other information and/or news. The Open Gym thereby appears as a specific manifestation of an increasingly popular phenomenon, i.e. the outdoor sports infrastructure, which is slowly gaining attention from researchers (see Cornax-Martín, de Salazar, Rosa-Jiménez, & Luque-Gil, 2020; Teare & Taks, 2021). What makes the Open Gym interesting for us, as educational researchers who are new to the field of sports, is that it manifests new possibilities for *learning about* and *through* sports next to *doing* sports. From our educational vantage point, this sparks curiosity about connections between sports and pedagogy that are made (possible) through this sports infrastructure. Hence, it makes us want to learn from the Open Gym too.

The purpose of our inquiry is to contribute to the literature regarding sports pedagogy by developing theoretical notions, based on empirical engagements, that render how these kinds of sports infrastructures could make up pedagogical places. Three research questions are formulated to guide us in this endeavor, including (1) what kinds of movements are apparent at the Open Gym, (2) what kind(s) of place(s) is/are emerging through these movements, and (3) what movements characterize the Open Gym as *a pedagogical place*. In what follows, we show how these research questions are based on insights from the literature about sports pedagogy and theoretical resources of the 'new mobilities', and we explain how these inform initial pedagogical notions of sports and pedagogical places. Subsequently, we explain how a methodology was informed by these notions, next to the idea of an 'ethnographic navigation', and explicate the methods that are related to this. The findings present movements as (continuing) attachments, contingencies, and (decentralized) concentrations, building up to arguments about the Open Gym as two kinds of places: a congealed place and a platform. In the discussion, we draw on these findings to formulate answers to the third research question, and introduce a specific pedagogical notion that characterizes the movements that make the Open Gym a pedagogical place. We end the paper with a discussion, rather than a definitive conclusion, and raise questions that elicit the empirical and methodological implications of the findings, and what these mean for the contribution we wish to make.

Theoretical Framework

Sports Pedagogy

In this paper, we initially draw on sports pedagogy, which constitutes a broad body of literature that expands on the implied pedagogies of sports *beyond* the formal domain of Physical Education (PE) and, thus, beyond typical pedagogical places like schools and youth clubs (Armour, 2011; Kirk & Haerens, 2014). For example, empirical studies within the area of sports pedagogy have used systematic

observations of children's play across natural landscapes to revise and revive conceptions of 'Bildung' (Sanderud, Gurholt, & Moe, 2020) or deployed reviews of (non-/in)formal professionalization practices of sports coaches to reconceptualize 'sports coach education' (Mallett, Trudel, Lyle, & Rynne, 2009). Next to this, sports pedagogy comprises conceptual studies that have, for instance, built on the framework of ecological dynamics and non-linear pedagogy to advance the notion of 'skill acquisition', which highlights how individuals learn sportive skills by adapting their bodies to affordances and constraints of performance environments (Chow & Atencio, 2014; Chow, Shuttleworth, Davids, & Araújo, 2019). Other conceptual studies have combined this ecological perspective with anthropological work to propose the notion of 'enskilment', which denotes how individuals learn in a self-regulated manner while engaging with dynamic tasks and knowledgeable others in the environment (Woods, Rudd, Gray, & Davids, 2021). These studies thus share the assumption that connections between sports and pedagogy are largely shaped by where they are taking *place*.

While subscribing to this assumption and the ecological perspective, we specifically combine this with a notion that considers the pedagogy of sports as education *about, through,* and *in movement* by Arnold (in Brown, 2013; see also Quennerstedt, 2019). The 'about' in this notion concerns *knowledge* (e.g., anatomical, technical, and socio-cultural) about movements while 'through' refers to *activities* that engender this knowledge. Finally, education 'in' movement denotes their interactions: as activities generate knowledge, and knowledge is deployed in new activities, movements allow for continuous learning and change (ibid). These three prepositions articulate a premise that is also upheld by ecological perspectives, that is, that sports are *relational,* rather than solely behavioral, endeavors (see Woods et al., 2021). What is further specific to this notion is that it focuses on movements and knowledge *as such* without assuming that there is an intentional individual who regulates these movements and who 'owns' skills. Hence, by the notion of education about, through, and in movement, our empirical engagement with the Open Gym focuses on all movements that generate pedagogical relations, that is, interactions that lead to continuous exchanges between knowledge and activities.

New Mobilities

While we draw on these pedagogical notions to situate our paper and to recognize the pedagogy in sportive movements, we acknowledge that the literature about sports pedagogy does not constitute a uniform theoretical framework by itself. Hence, to further enrich our framework, we turn to theoretical resources of the 'new mobilities', a wide repertoire of premises, concepts, and related heuristics that position movements as the ontological basis of their research phenomena (Sheller, 2014; Sheller & Urry, 2006). These resources also guide our attention to the entanglement of movements and places, while moving beyond the assumption that places are 'static' or 'given' geographical sites that streamline or facilitate movements. Instead, places are considered as ongoingly made by *mobile* interactions between people and matter (i.e. movements) and *immobile* conditions that guide, block, or otherwise orchestrate movements (Adey & Bissell, 2010; Lewis, 2021). To illustrate, a set of drawn lines, rules, and a goal only turn into a soccer field when moving soccer players and a ball are engaging with it. The same location becomes an entirely different place if, for example, it attracts musicians and an audience for a concert, or when it is being renovated by construction workers and their equipment. This exemplifies how the combination of moving and 'immobile' people and matter characterize places (Sheller & Urry, 2006).

Along these lines, the theoretical premises of new mobilities have provoked a consideration of schools, campus sites, and other pedagogical places as open-ended processes of interactions rather than bounded, fixed sedimentations (Leander, Phillips, & Taylor, 2010; Waters, 2017). For example,

classrooms are understood as dynamic constellations of various 'local agents of change', i.a. policymakers in board rooms that draft classroom policies and when teachers and students who enact, transform and inform those policy statements together with/in the classroom (Hartong & Nikolai, 2017; Lewis, 2021). Otherwise, online courses and homes turn into new pedagogical places as online technologies allow institutions to 'move' to students in these different locations, next to students moving to the campus (Bayne, Gallagher, & Lamb, 2014; Ross & Sheail, 2017). In this sense, these mobilities-informed studies show how pedagogical places are not 'given' nor once-and-for-all made by policy, online developments, or other macro-level phenomena, but constitute interactions across various localities.

Pedagogical Places and Bodily Movements

Connecting this premise to the pedagogical notion of education about, through, and in movement, we argue that sports infrastructures like the Open Gym can be characterized as *pedagogical* places by movements that relate activities (through and in movement) to knowledge (about movement). To deploy this argument in our empirical inquiry, we follow Pink (2011) by prioritizing a focus on *bodily movements*. As she elaborates, bodily movements are particular performances (cf. activities) that are guided by sensory knowledge about the place (i.a. what can I hear, feel, see). This develops into 'embodied knowledge' (cf. skill acquisition) that, in turn, renders *further* bodily movements as 'tacit navigations' (ibid). For this reason, we position bodily movements as enactors of connections between pedagogy (knowledge-activities), sports, and *specific* places.

Important for this inquiry is *how* these connections between bodily movements and knowledge unfold. For example, 'performance environments' that are purposefully designed for 'skill acquisition' mix fixed and adaptive features (e.g. a common lifting construction with different weights and personal exercise schedules) based on general knowledge about how to achieve pre-defined goals (see Renshaw & Chow, 2019). Alternatively, sports environments that are made through 'representative co-design' integrate knowledge and needs of involved sports practitioners, which leads to the (re-)invention of sports practices (Woods, Rothwell, Rudd, Robertson, & Davids, 2021). In a similar vein, online sports communities inspire dynamic knowledge exchanges between sports practitioners around the world, which makes this 'world wide gym' an 'epistemic culture' that leads to new practices, and new arrangements, in 'local gyms' (see Säfvenbom & Stjernvang, 2020). These examples are not explicated to say that one pedagogical place trumps the other: it is to illustrate how a place, may it be 'fixed', 'changing' or even online, can effectuate multiple pedagogies at once (cf. Pink, 2011). Moreover, it shows how important it is to consider '*how new (and old) mobilities of learning are not distributed over nude and abstract landscapes*' (Leander et al., 2010, p. 346) but that such landscapes are substantive conditions, including people *and* matter, that dynamically shape and are being shaped (cf. Olwig, 1996, p. 645). In other words, landscapes are places that are not just observed 'out there' but that constitute social and material conditions that enable and restrict particular movements, which are important for understanding their implied pedagogies.

Methodology

The theoretical resources of these ecological perspectives and the new mobilities are integrated into the methodology of this study while following the rationale of qualitative research that they operate as *lenses* (Creswell & Creswell, 2017). This means that they guided us in designing the methods for data collection, directed our focus during the analysis, and aided a focused description of the findings. We also draw on *methodological resources* that are offered by new mobilities, and guidelines for 'mobile ethnographies' in

specific (Novoa, 2015). These guidelines allow us to attune 'traditional' ethnographic research methods (immersive engagement, fieldnotes, theoretical sensitivity; see also Creswell & Creswell, 2017) to our interest in bodily movements while also accounting for methodological movements of the research itself, like changes in the research instruments and moving presence of researchers in the field (e.g., Novoa, 2015). We further specified the methodology by turning to the idea of an 'ethnographic navigation' by Bravo (1999). That is, this ethnographic navigation is initially deployed to explain and critique how fieldworkers follow, record, and map movements of local informants while these records and maps are necessarily 'displaced', 'fixed', and in some sense capitalized upon, when writing them up. This invoked a sensitivity for continuous connections between movements as appearing on-site and appearing from (this) paper.

In this light, the data collection implied fieldwork conducted by two researchers who regularly attended the Open Gym over five months. First, they attended work-outs five lessons (i.a. (online) yoga, dancing, strength training, and boxing) and, then, attended the Open Gym beyond the lesson program. These encounters were documented through field notes, sketches, and notes of informal interviews, all theoretically guided by a focus on bodily movements and how these were generated by (im)mobile conditions and sensory knowledge (i.e. what is heard, seen, smelled, and felt) (see also Vannini, 2015). Based on our fieldnotes, we also drafted questions for a semi-structured interview protocol that attuned to the specific features of the Open Gym and the different roles of participants. That is, we organized four formal interviews of, on average, one hour with different participants: one initiator of the Open Gym, two regular participants, one instructor, and two policymakers who had supported the Open Gym. At the same time, these questions remained true to our theoretical and methodological tenets, that is, keeping a focus on bodily *and* methodological movements that shape our empirical inquiry, without explicitly integrating (theoretical) concepts. The whole research team (i.e., all four authors of this paper), was involved in vetting the protocol to uphold the rigor of the interview protocols while considering that it was impossible to do a pilot test among the research participants who all had unique roles (Ravitch & Mittenfelner Carl, 2021). Ultimately, the questions focused on i.a. movements *of* the Open Gym (where and how did it emerge and evolve), and movements *with* and *across* the Open Gym (how do people and materials move, (how) does this evolve before, while, and during exercise). As measures related to the COVID-19 pandemic changed over the course of the months, two interviews could continue at the Open Gym, while two other interviews were conducted via teleconference. The data collection followed a principle of relational ethics, by which the approval of an institutional review board was waived. Agreements with research participants were continuously sought before each interview, as the researcher explained the goals of the study, and discussed with the research participants their wishes concerning their contribution (i.e. the use of their name(s), and how and for what purposes their contribution could be used). These wishes were written and confirmed by signing an informed consent form. Moreover, research participants were consulted at the end of the process to review the manuscript and give written consent to publish it.

The data analysis was a collaborative and recursive process characterized by inductive and deductive sense-making processes and recursive engagements with empirical data and theoretical insights from the deployed literature (LeCompte & Schensul, 2013). This meant that, first, two researchers refined field notes and sketches, transcribed interviews into digital documents without using 'transcription software', and developed memos about initial patterns in the data that were relevant to the research questions (i.e. the inductive sense-making). Second, all documents were repeatedly read by the members of the research team to highlight data fragments that related to the theoretical sensitivity for bodily

movements (i.e. recursive engagements). Based on these fragments, the same two researchers developed textual *and* visual descriptions to generate complementing perspectives about the dynamics and specifics of the place while necessarily taking them out of their lively context (cf. 'displacement' by Bravo, 1999). An important consideration herein was to use the textual descriptions to provide details on how researchers encountered movements while the sketches would yield a 'birds eye' view, leaving out those details that will necessarily change along with the evolvements of the place itself. Over (iterative) cycles of new discussions within the research team, the two other researchers were 'critical friends' who helped to seek connections between the textual descriptions, sketches, and concepts in and beyond the theoretical framework (i.e. inductive-deductive sense-making). Through these processes of dialogic engagement, we pursued a rigorous and robust analysis that guided us in our aim to relate and contribute to the existing literature on sports pedagogy (Ravitch & Mittenfelner Carl, 2021).

Findings

The findings are organized into four sections that sequentially address what kinds of movements are being recognized and how these movements make up two interrelated places. The descriptive accounts follow first-person perspectives of (one of the) two researchers, as this allows sensory processes that guided our bodily movements to come forward next to the bodily movements of (other) local informants (Pink, 2015; Vannini, 2015). The reflective accounts expand on these descriptions by theoretical interpretations, spatial imag(inari)es, and elaborations on existing pedagogical notions.

Attachments and Contingencies as Movements of the Open Gym

On a mid-October day, around 7 PM, I (one of the two researchers) prepare for a strength training at the Open Gym by looking at the lesson program on the website, searching for the location by a mapping application on my smartphone, and following the biking route the app had suggested. As I arrive at the destination, I park my bike next to one of the calisthenics constructions. I walk around and I see, attached to the calisthenics construction, ten 'house rules' (i.a. 'keep the place clean', 'treat others with respect'). However, I don't see a designated instructor. I walk over to another athlete to ask: 'Do you know where the strength training takes place?'. *He takes out a smartphone from his pocket:* 'Let's see if there is a training…'. *I answer:* 'Yes, yes, I know there is one now, today. But where is it, and with who?' 'There is a different instructor each week, so I don't know who will be there today.' *I walk around further to find the instructor, while a person sitting at a bench takes off his jacket, and a t-shirt with the Open Gym emblem appears. I approach him while two other athletes gather from other directions, he explains that he will lead the strength training. He asks us to arrange gym mats into a (semi)circle on another part of the terrain, where there is a glimpse of street light* (see Figure 1). . *We position ourselves on the mats and mirror the movements of the instructor. Because the density of the mats differs, we have to make slight adjustments: to keep my balance, I sometimes need to place my hands, feet, or core on the gravel-covered ground. As the sun sets over the training, the street lights become insufficient to clearly distinguish the bodily movements of the instructor. Ultimately, the instructor expresses that, given the early dusk, it will be the last strength session of the season.*

These descriptive accounts set out how, first, the pinpointed location of the Open Gym on a (digital) map and, next, the arrangement of calisthenics constructions, cabins, and pillars of the overpass establish a set of stable conditions that direct bodily movements *to* and *at* the Open Gym (see Figure 1). Second, they show how these mix with more flexible conditions, including the undefined presence of the instructor, the differential fabric of the mats, and the shifting time of sunset. This interchange between (im)mobility shows how bodily movements that hinge on stable conditions could develop towards *attachments*, that is, sustained activities that generate commitments to *particular* objects and constructions

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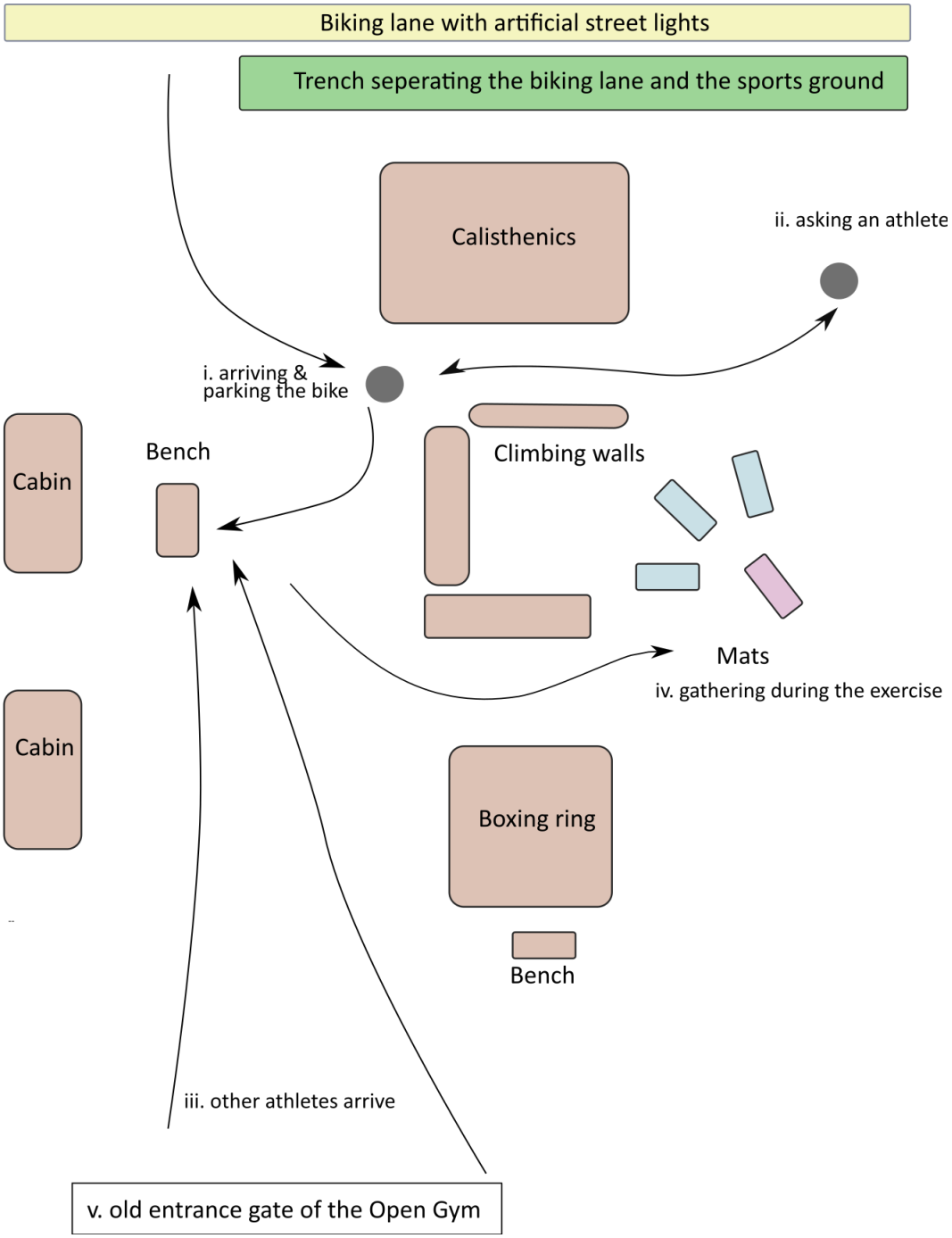

Figure 1. Movements leading up to the strength training class, showing how people arrive from different directions, how themovements are orchestrated around the constructions, and while shifting the materials (i.e. sports mats)

Next to this, there are mobile conditions (e.g. the mats that can be re-arranged, the changing timetable) that allow the instructor and athletes to deploy their knowledge and, in this sense, to engage in the *co-design* of the environment (Woods, Rothwell, et al., 2021). But some mobile conditions (i.a. sunlight, street light, the fabric of the mats) operate *contingencies,* i.e. emergent interactions between bodies and the changing environment that cannot be fully designed by the practitioners but that urge a response (Pink, 2011). Hence, it is by the combination of attachments, practices co-design, and contingencies that an education *through* and *in* movement illustrated, that is, a continuous interaction between activities, embodied knowledge, and changes in the environment (see Brown, 2013).

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The Open Gym as a Congealed Place

During a formal interview, one of the initiators explains how the Open Gym started when he and his athlete friends were looking for a new place to exercise after their previous sports hall was taken down. On the unused piece of land underneath this overpass, they reckoned to build sports constructions while being somewhat sheltered from rain and without being too visible. In this way, they did not have to wait for the official permission of the landowners. While they anticipated that someone would eventually tell them to leave, the contrary happened: their constructions attracted other athletes who suggested they filed for support from the municipal government which had just opened a project to encourage (young) citizens to engage in sports. Local policymakers explained in another interview how they received the file from the initiators and agreed with their ambitions: maintaining and expanding an outdoor sports infrastructure with recycled materials while attracting and engaging young people from different parts of the city. The policymakers granted their support by, first, operating as liaisons between the Open Gym and different youth organizations (i.a. sports clubs, organizations for newcomers). Second, they helped to realize a legal agreement with the landowners, who set the condition that the Open Gym had to 'move' a couple of hundred yards (see Figure 1; the entry gate at the former spot). Finally, the policymakers provided subsidies for insurances, for materials that are difficult or unsafe to recycle (i.a. bolts and screws), and volunteer allowances. However, the initiator explained that most of their work was done by themselves, friends, family, and other athletes who did not request financial compensation. Rather than 'members', they were referred to as 'Open Gymmers' as they were all similarly 'part' (viz. participants) of the Open Gym. Still, 'being part' implied particular responsibilities, which was one reason to formulate the ten 'house rules' and, later on, to introduce 'session passes' that would urge voluntary contributions to maintain the place. As I spoke to two regular participants (thus, Open Gymmers), they explained that their responsibilities developed gradually. They started exercising at the Open Gym when there was only one construction, while they met like-minded athletes and exactly the right equipment to continue their favorite sports: climbing. They kept 'sticking around', developed a weekly workout routine with the DIY infrastructure, and explored new sports on the lesson program. The initiators of the Open Gym noticed they were continuously coming back, and included them in closed social media groups, channels, and chats to organize activities. Moreover, they were asked to help clean up or fix constructions while they could leave their gear locked in one of the two cabins present at the Open Gym (see Figure 1).

These descriptive accounts stage how the ostensibly 'immobile' conditions of the Open Gym, including its location and stable constructions, are not definite results of a predefined plan. Rather, they are coming about through different kinds of *contingencies,* unanticipated yet guided interactions between (human) bodies (i.a. athletes, policymakers, youth organizations) and materials (i.a. an overpass, files, recycled materials), mediated by senses (i.a. (in)visibility, its shelter from rain) (Pink, 2011). While these contingencies develop into particular immobilities, i.a. legal agreements and fixed constructions, they also call for participants to involve their knowledge in a *recursive* co-design of the place (cf. Woods, Rothwell, et al., 2021). In other words, being 'part' of the Open Gym urges bodies to take care of the place while thinking *with* the changing environment and what is needed *at that moment* (Decuypere, Hoet, & Vandenabeele, 2019). As this shows how initial commitments to the objects of the Open Gym flow over into new responsibilities, the mix of (im)mobile conditions generates *continuing attachments,* including the growth of (new) commitments, routines, and ambitions (Decuypere & Simons, 2019). Because these contingencies and continuous attachments make the Open Gym into a place that is interchangeably immobile and changing, solidifying and flowing, these movements materialize Open Gym as a *congealed place*.

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Further Attachments, Contingencies, and Concentrating Movements of the Open Gym as a Platform

At the end of September, we (two researchers) cycled to the Open Gym to attend our first yoga class. It was raining, and the mudded ground path that departs from the paved biking lane towards the Open Gym showed traces of bicycle tires and footsteps. We parked our bikes between two cabins, while one person walked back and forth between the cabins and the boxing ring to arrange yoga mats and a portable audio installation into a circle. Gradually, more people gathered with us around the boxing ring, either from the opposite side of the park by bike or the climbing walls (see Figure 2). The person who had assembled the mats turned on some music, invited us into the boxing ring, and introduced herself as the yoga instructor. She asked us to mirror her movements while concentrating on the here and now. Because the boxing ring is positioned just underneath the overpass, we continuously heard the trains intermingling with the music and the vigorous grunts of athletes at the climbing wall. While the dusk had furthered over the class, we only saw the contours of the instructor's body making a slight bow with folded hands while she kindly asked us to write our name in a logbook (for contact tracing), to clear our mats and make a 'regular' contribution through the session pass of the Open Gym. While we sought the contribution jars, the logbook, and disinfectant in the middle of the boxing ring by touch, a larger group of people gathered around the boxing ring to start a dancing class. In a later interview, the instructor explained that she purposefully organized her lessons in the boxing ring or, when there was a bigger group and she needed a larger surface, assembled mats and other objects (e.g. decorative lights, boxes, or wooden chairs) to make demarcations at another part of the site. 'Otherwise, people can drift off to anywhere, and you may never notice them'. *Asking further about how she got in contact with the Open Gym, she explained how she sent emails to various 'places' through an intermediate dancing initiative. The other way around, as the initiator explains, the Open Gym actively sought new instructors.* 'We see the Open Gym as a platform and don't take this too literally. But the platform, we want to use as much as possible. That's why we do 'open calls' for instructors, and youth organizations and say: use our sports park.'

While these descriptive accounts (re-)iterate solidifying and flowing movements that make up the congealed place, they integrate new kinds of movements too. These movements are illustrated by the focused gathering of human bodies (i.a. athletes and instructors) and objects (i.a. yoga mats, audio installation) from various directions (see Figure 2). On the one hand, these movements are made possible by the central position of the boxing ring which allows to attract and intermingle different kinds of sensory knowledge (i.a. music, trains, sounds of people, see traces in the mudded ground path). On the other hand, exemplified by the statement of the dancing instructor, these movements are (temporarily) *held together* by demarcations of, among other things, the boxing ring. In this sense, beyond *attachments* between objects and people and *contingencies* arising from the changing environment, bodily movements are rendered as *concentrations*: forms of shared attention that are 'kept' by a delineated moment and object (see also Decuypere & Simons, 2019; Sørensen, 2009). These attachments, contingencies, and concentrations apply, in a different way, to the connections between instructors, the initiators, and the location of the Open Gym too. The metaphor of a *platform* thereby illustrates how the Open Gym provides social and material conditions to attract and bring together people while giving them a 'surface' to act on (Gillespie, 2010).

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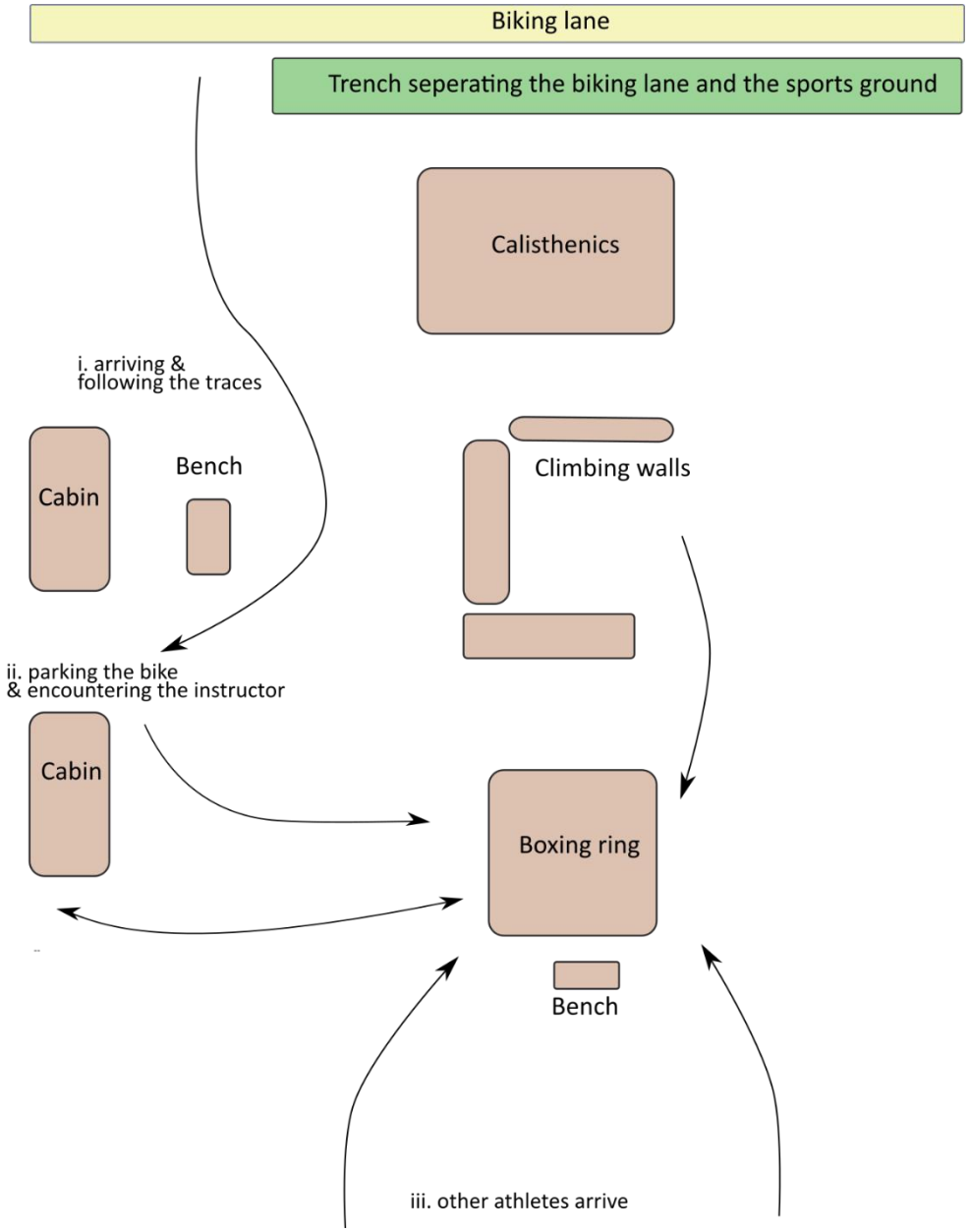

Figure 2. Movements leading up to the yoga class, illustrating how movements are made through movements from various directions (i.a. entrance, moving between constructions)

The Open Gym as a Platform Place

It is February 2021, and while the Open Gym usually continues its dancing and yoga classes during the winter season at indoor venues, the pandemic-related measures have urged these classes to go online. As I (one of the researchers) rush from my kitchen to the laptop, which is on the dining table in the living room, I connect it to the TV, which is positioned on a much lower piece of furniture in the same room. The light of the two screens fills the room as I shove the coffee table between the TV and couch to the side, making room for my yoga mat. After establishing a connection to the internet, the instructor and the fellow participants appear on the screen. It is here, wedged between the dining table and its chairs, the TV, the couch, and the small coffee table, that I follow their movements during the yoga class (see Figure 3).

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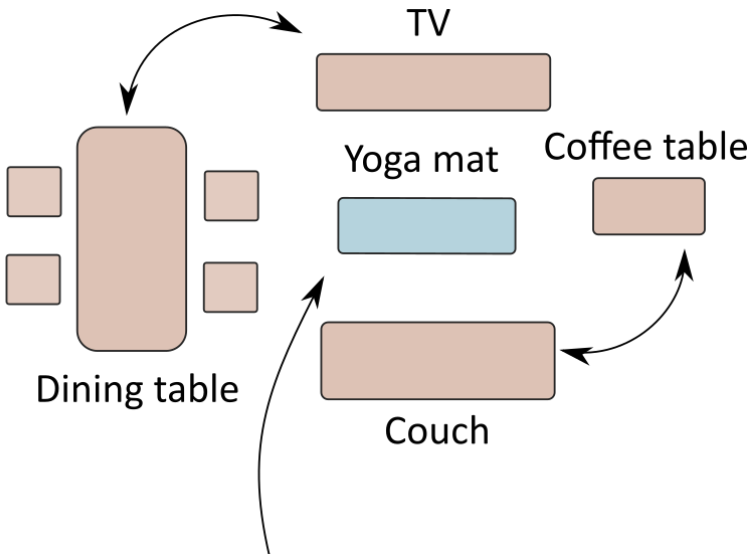

Figure 3. Movements with the furniture in the living room, while preparing for the online yoga class.

In the same winter season, I occasionally went to the DIY infrastructure. For instance, I went on a cold Tuesday afternoon during office hours when there were three other athletes at the calisthenics construction. On an exceptionally sunny Sunday, there were four people in fencing costumes in the boxing ring, multiple groups of people hanging around/on the climbing walls, someone on the slackline, and multiple athletes at the calisthenics constructions chit-chatting or giving instructions to one another (see Figure 4). Still, reminded by crafted signals, athletes pursued their movements at a 'social distance'. While I adjusted my 'usual' workout routine to the available equipment, I asked some Open Gymmers how they developed their exercises and whether they used the manual on the website of the Open Gym. They responded that the manual was 'basic' and that they rather assembled various sources of information from the Internet and from books to experiment with new exercises. They also say that the infrastructure regularly changed, and new climbing routes or new weight lifting equipment are added, which meant that they could or had to renew their routines. The initiator of the Open Gym explained they were also building mobile constructions that would be (temporarily) placed across different parts of the city, while they were supported by the municipal government to make the necessary legal arrangements. Moreover, the initiator had been in contact with people in other municipalities to guide and inform them about the principles of the DIY infrastructure in an 'open source' way: allowing other people to build and expand on their initial ideas without claiming ownership.

These descriptive accounts articulate another mingle of (im)mobile conditions of Open Gym, including weather, societal, legal, and material evolvements. These evolvements make the Open Gym move *into* home settings (see Figure 3), *at* the changing construction (see Figure 4), and *across* and *beyond* the city (see mobile constructions and open source principles). Hence, they illustrate how the Open Gym 'flows with' the currents of society (cf. Pink, 2011) and thereby generates multiple, geographically dispersed moments and situations for shared attention: it generates multiple, *decentralized* concentrations. It is here where the metaphorical (and not literal) reference to the Open Gym as a *platform* unfolds: a commonly accessible ground that attracts, holds, and, then, *releases* various activities without claiming ownership or *individual* responsibility (see also Gillespie, 2010). This means that, as a platform, the Open Gym is a place that generates 'attachments', i.e. particular routines for people to hold onto and sustain their (sports) activities, while equally allowing flexibility to 'flow with' contingencies and to spread across different sites (Decuypere & Simons, 2019; cf. supra). This means that the platform engenders tangible human-material interactions that allow people to connect on a sustained basis while being on the move.

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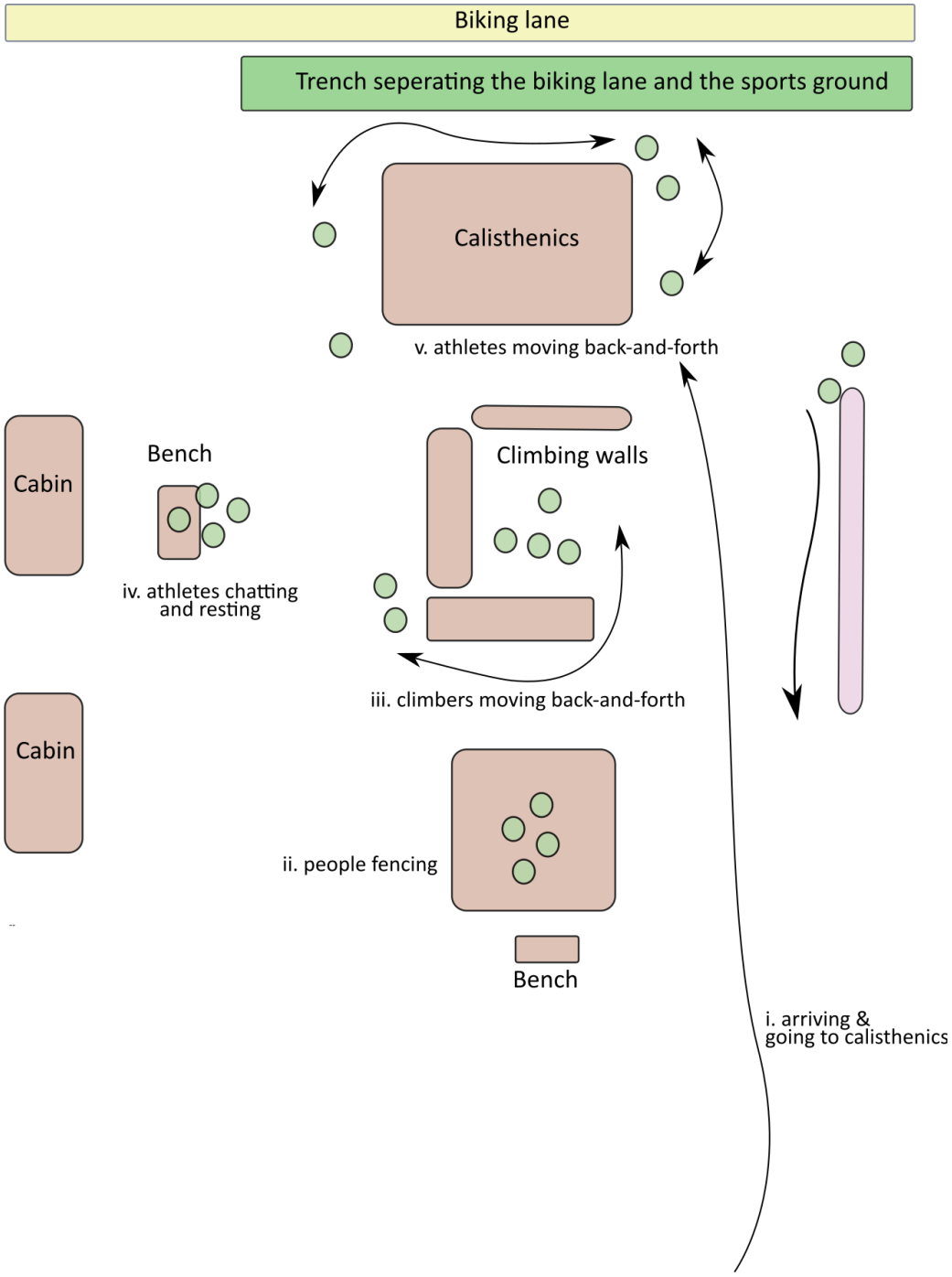

Figure 4. Movements during a sunny Sunday, while the researcher moves across different (groups of) athletes.

Discussion

With this paper, we have set out an empirical inquiry into an outdoor 'DIY sports infrastructure', named the Open Gym. The purpose of this inquiry was to render particular practices that make such sports infrastructures into pedagogical places more clearly by adopting the lens of new mobilities. Furthermore, the purpose was to integrate these renderings into theoretical notions and, by these means, contribute to the literature regarding sports pedagogy. Whilst situating the paper among other studies taking an ecological perspective to sports pedagogy, we built on the pedagogical notion of sports as education *about, through,* and *in movement,* and deployed theoretical resources of 'new mobilities' to direct our focus

towards bodily movements that make up places. The methodology was informed by the idea of an 'ethnographic navigation', which meant that fieldnotes and (in)formal interviews were made to record bodily movements while analyses rendered these records into descriptive and reflective accounts. This generated answers to three research questions, which are largely presented by the findings.

First, the findings showed different kinds of movements that are made by the Open Gym, which are characterized as *(continuing) attachments, contingencies,* and *(decentralized) concentrations*. These movements result from, respectively, more-or-less solid ties between human bodies and objects, incidental interactions mingling through these ties, and specific ways of coming together by mutual attention. Second, the findings demonstrated how the Open Gym manifests a 'congealed place' by interchanges of flowing contingencies and solidifying attachments, and a 'platform' by gathering and dispersing people and things into (de)centralized concentrations. Nevertheless, as the congealed place depends on the tendency of bodies to gather and diffuse, and the platform hinges on the flowing and solidifying movements of the congealed place, it can be said that the Open Gym manifests these two kinds of places simultaneously, and interdependently. In other words, the Open Gym cannot be understood as solely one of the two places.

It is by means of these findings that we propose an answer to the third research question, which urges us to stipulate what (kinds of) movements characterize the Open Gym as a pedagogical place. Initially, we had built on the literature to characterize (continuing) attachments and (decentralized) concentrations as typical pedagogical movements that allow for sustained engagements and mutual attention between people and particular places (Decuypere & Simons, 2019; Sørensen, 2009). Next to this, we denoted contingencies, which are not mentioned as typical pedagogical practices in the literature but that, based on our empirical inquiry, continuously interfered in 'typical' attachments and concentrations and thereby rendered them in a new pedagogical light. That is, contingencies made the Open Gym a place that is never 'given' nor 'finished' but that requires continuous in(ter)vention together *with* the weather, the varying presence of participants and instructors, and political, societal, and legal evolvements (cf. Pink, 2011). This continuous demand of care and maintenance generated possibilities for *new* exchanges between knowledge and activities: they enacted a pedagogy 'in' movement (see Pink, 2011; Brown, 2013). Similar to what is said from an ecological perspective on sports pedagogy, this means that learning through sports implies more than simply 'navigating' a pre-defined trajectory to achieve a particular goal (Woods, Rudd, et al., 2021). In contrary to what has been assumed before, however, it also means more than connecting embodied knowledge and movements through 'tacit navigations' (cf. Pink, 2011). Instead, we argue that the bodily movements that characterize the Open Gym as a pedagogical place can be captured by the notion of *learning to navigate*: movements that urge continuous *(re-)thinking with* changing environments while becoming *part*(icipant) *of* this environment (Decuypere et al., 2019). In this vein, it is a notion that portrays a collective of people and things, a 'milieu' that is not appropriated nor externalized but that continuously confronts us and demands us to take care (ibid.).

Together with the specific findings, this notion also sets forth the contribution that we wish to make to the literature about sports pedagogy. That is, it is a notion that goes beyond the idea that there are particular goals to be achieved through sports and beyond the individual who learns to self-regulate by responding *to* the environment (Woods, Rudd, Robertson, & Davids, 2020). Instead, learning to navigate accentuates the continuity of pedagogy (cf. learning) and movement (cf. navigate) as well as where they meet and connect: through making place(s). In line with our argument that the place of the Open Gym is never 'finished', we do not wish to draw a conclusion about what learning to navigate *is* but, instead, we raise and encourage discussions and empirical research about how increasingly popular sports

infrastructures could evolve as pedagogical places (see Cornax-Martín et al., 2020). For instance, how do (young) people grow attachments to places for sports infrastructures, how do they respond to unanticipated changes of/in these places, and what allows these places to engender connections among different people and things? These questions also exemplify how this inquiry intends to make a contribution to practices in and of existing infrastructures, like Open Gym, that have the ambition to include and connect (young) people from various parts of the city. That is, without fixing 'best practices', these questions guide sports practitioners in practices of *co-design* and, by these means, generate contextualized places that evolve with their participants (see Woods, Rothwell, et al., 2021). In the specific case of our engagement with the Open Gym, these questions are planned to be integrated into educational materials that invite participants to elaborate on how to think about and *with* the Open Gym. This shows how, again, the Open Gym is a pedagogical place that is continuously evolving through the engagement of people and matter moving *with* the environment.

The empirical inquiry is, as any other study, not without limitations. While the theoretical resources of new mobilities operated as useful lenses in our qualitative research, it limited our focus on concrete interactions while experiences, motivations, and ambitions of the participants moved to the background. Hence, we encourage more ethnographic studies into sports infrastructures to complement our findings by examining *why* young people engage with these kinds of places, to be able to build on those features through which their engagement is encouraged. Another missed avenue has been that of policy analysis as, during the interviews with local policymakers, we noted that various political developments ran through, and shaped, the practices of the Open Gym. Hence, we encourage future studies to pursue more in-depth analyses of how policy enables, hinders, and/or shapes the development of these collective sports practices. Finally, we acknowledge that the findings cannot be separated from the adopted 'ethnographic navigation', which primed our focus on navigations of/in this place. However, we want to challenge or complement Bravo's (1999) interpretation of the ethnographic navigation as a *dis*placement of movements, as this would imply that the research has written its findings from 'nowhere in particular'. Instead, we acknowledge how it generates specific places too: the findings are not 'representations' but new *creations* of the places of the Open Gym (see also Vannini, 2015). This is, for example, visible in the way that we portrayed the place of the Open Gym through particular, detailed accounts while complemented with 'rough' and necessarily static sketches that leave out details that co-evolve with the changes of the place. This means that the interpretations about the pedagogies of sports are made through our own engagement with the Open Gym and, in this way, we were involved in a particular kind of 'co-design' of the place too (see Woods, Rothwell, et al., 2021). This, however, does not mean that the Open Gym was, is, or will be pursued as such. Rather, by moving 'with' research participants, this paper shows what has been learned and what can still be learned by engaging with sports infrastructures like the Open Gym.

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