MAPS · MAISON D'ANALYSE DES PROCESSUS SOCIAUX

DESIGNING LANDSCAPES OF AFFORDANCES FOR AGING IN PLACE

Ola Söderström, Tania Zittoun, Fabienne Gfeller, Aurora Ruggeri and Isabelle Schoepfer

unine
UNIVERSITÉ DE NEUCHÂTEL

Authors

Ola Söderström, Tania Zittoun, Fabienne Gfeller, Aurora Ruggeri & Isabelle Schoepfer

Ola Söderström

Ola Söderström is Professor of human geography, University of Neuchâtel

ola.soderstrom@unine.ch

Tania Zittoun

Tania Zittoun is professor of psychology, University of Neuchâtel

tania.zittoun@unine.ch

Fabienne Gfeller

Fabienne Gfeller is postdoctoral fellow at the Institute of Psychology and Education, University of Neuchâtel

fabienne.gfeller@unine.ch

Aurora Ruggeri, University of Neuchâtel

Aurora Ruggeri is PhD candidate at the Institute of Geography, University of Neuchâtel

aurora.ruggeri@unine.ch

Isabelle Schoepfer, University of Geneva

Isabelle Schoepfer is researcher at the Department of Geography, University of Geneva

isabelle.schoepfer@unige.ch

Abstract

This paper aims to contribute theoretically, methodologically and empirically to research and interventions regarding aging in place. Theoretically the paper contributes by drawing on literature on landscapes of care and landscapes of affordances to suggest a multiscalar and more-than-human approach to ageing in place. Methodologically, we argue that studying ageing in place requires a participatory and translational methodology. Participatory methods are, on one hand, a pre-requisite for an understanding of how older adults live their daily lives, and particularly use a 'landscape of affordances' in their social and material environment. A translational process, on the other hand, is necessary to elaborate research results incrementally across the different stages that lead to interventions on the ground. Finally, empirically, we draw on results of a study based on go-along interviews, photographic observations, and biographic interviews. In its empirical part, our paper describes the difficulties and gains of the different aspects of this participatory and translational process. In summary, the paper both develops the conceptual underpinnings of 'ageing in place' and informs the methodologies of applied research in this domain.

Keywords

Ageing

Landscape of care

Participatory research

Translational process

Acknowledgements

1. Introduction

Ms Dujardin lives in an old farm, which she shares with her daughter's family with whom she is in bad terms. The house is located at the top of a village on a slope of the mountain overlooking the lake. Every day, she goes for a walk in the field and rests on a bench at the fringe of the forest; this is also the only flat pathway, parallel to the slope, on which she can walk. She likes the place where she lives; yet in the village, the post office and the school are long closed. As she has no driving license anymore, and the bus that connects the village to the rest of the Canton circulates only occasionally, it is difficult for her to meet her last living friends or to go to shops and cafés, unless someone drives her. However, to provide new opportunities of social interaction for inhabitants like Ms Dujardin, the commune recently decided to refurbish the old school into a meeting locale.

This transformation of an abandoned school in a Swiss commune derives from a participatory action-research in the Swiss Canton of Neuchâtel, entitled "ReliÂge", in which the authors of this paper have been involved. It is the result of a process during which participants – older persons, care workers, state officials, civil society organisations, geographers and psychologists – mapped resources for and obstacles to older people's everyday activities, to design communal action plans for older people. Drawing on this collective experience, the aim of this paper is to contribute to studies on aging in place (Bigonnesse & Chaudhury, 2021; Forsyth & Molinsky, 2021) and landscapes of care (Milligan & Wiles, 2010), both at a theoretical level, and at a methodological level.

The paper falls in three parts. In the first, theoretical part, we position our paper in the interdisciplinary literature on aging. We develop an original framework combining three complementary approaches: studies on landscapes of care in human geography (Milligan & Wiles, 2010), new directions in sociocultural psychology of development (Grossen et al., 2020; Zittoun & Baucal, 2021), and recent advances in affordance theory (Chemero, 2003; Ramstead et al., 2016). We propose a multiscalar approach to aging in place articulating landscapes of care and landscapes of affordances. In the second part, we present the context in which our project took place, and our participatory and translational methodology. We argue first that participatory methods are a pre-requisite for an understanding of how older adults live their daily lives, and particularly use a 'landscape of affordances' (Ramstead et al., 2016) in their social and material environment. Second, a translational process (Drolet & Lorenzi, 2011; Parnell & Pieterse, 2016) is necessary to elaborate research results incrementally across the different stages that lead to interventions on the ground (in our case: communal action plans and specific interventions for older people). In the third part of the paper, we highlight the

contributions of this project: on the one hand, it invites a new theorisation of aging in place, and on the other hand, it suggests directions for developing translational interventions aimed at supporting the life of older persons.

2. Aging in place, landscapes of care, and affordances

'Aging in place' has become a paradigm in public policies regarding older persons. Aging in place refers to the possibilities for older adults to live an independent life in their community rather than in nursing homes. Many countries in the Global North, among which Switzerland, have developed such policies since the 2000s.aging During the same time span, aging in place has also become an expanding interdisciplinary research domain (Rogers et al., 2020). Studies of aging in that field show that aging in place corresponds to the aspirations of most older persons, but that it took time to consider the phenomenon from their perspective (Wiles et al., 2012; Wiles & Andrews, 2020). Older people describe what matters in places as extending widely beyond their own homes (Wiles et al., 2012). Work by geographers, but also in other disciplines related to environmental gerontology, has thus contributed to consider place 'in a much more 'geographically elastic' way which incorporates dwelling, neighbourhood, community, region, and nation' (Andrews et al. 2007, p. 158). Studies of aging in place also converge on the fact that the aspects that are important for people aging in place extend far beyond functional characteristics of place and space, such as services and infrastructures, to encompass a wide range of material, social and affective phenomena (Bigonnesse et al., 2014; Bigonnesse & Chaudhury, 2021).

The production of scholarship in this domain has expanded in pace with this increasing breadth of themes and questions. A recent scoping review analysed over 3,600 publications related to aging in place and found that they dealt with five key themes: place, social networks, support, technology and personal characteristics (Pani-Harreman et al., 2020). Considering this breadth of scholarship, it is important to develop a model or analytical framework to better conceptualise aging in place and logically articulate its constitutive dimensions. Such an effort has been made recently by Bigonnesse and Chaudhury (2022) on the basis of capability theory (Figure 1). In their framework aging in place is 'influenced by five central components: '(1) place integration, (2) place attachment, (3) independence, (4) mobility, and (5) social participation. These five components are, in turn, influenced by four factors: individual characteristics, accessibility of the built environment, proximity of services and amenities, and development and maintenance of meaningful social connections' (Bigonnesse & Chaudhury, 2022, p. 64).
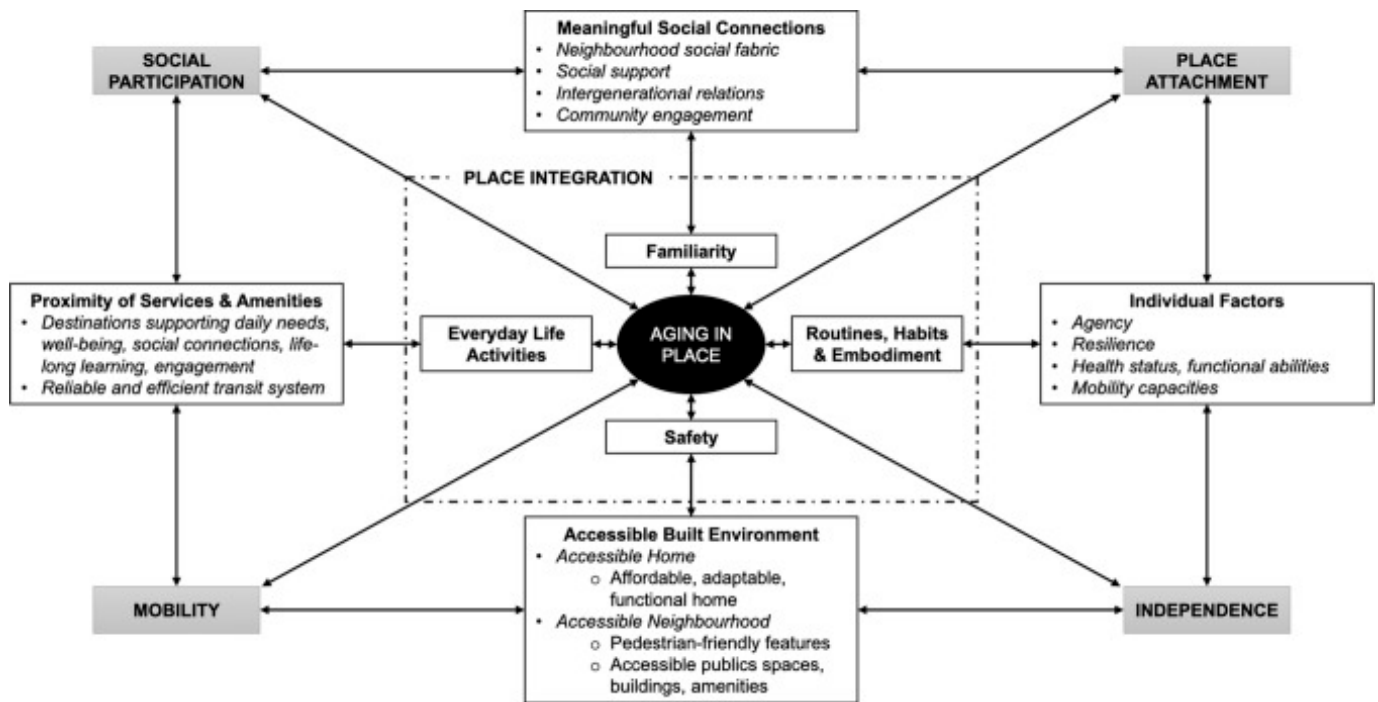
Figure 1: Conceptual framework on aging in place in a neighborhood environment from a capability approach (source: Bigonnesse & Chaudhury 2022, p. 64).

Central components *directly* influence, while the four factors *indirectly* influence, aging in place. Moreover, these factors and components such as mobility and independence are mutually constituted. Having the capacity to drive a car or take public transport are factors influencing independence. As a consequence, Bigonnesse and Chaudury (2022, p. 65) define aging in place 'as an ongoing dynamic process of balance enabling an individual to develop and maintain place integration, place attachment, independence, mobility, and social participation'.

We share many principles of this broad and carefully designed framework, among which: the focus on agency, an ecological perspective, and multiple geographic scales. We also see some limitations in the capability-based approach which foregrounds the individual but does not give much weight to structuring factors related to the political economy of aging. As previously mentioned, the deinstitutionalization of older people care is embedded in neoliberalisation, while national, local or regional policies may significantly shape access to housing, mobility and the provision of an aging-supporting environment. In our case, efforts in the Canton of Neuchâtel in recent years to develop variegated housing solutions and communal action plans are testimonies of State action that cannot be reduced to the sole engineering of neoliberalisation (Gfeller et al., 2022).

To develop further a conceptual framework and toolbox for studying aging in place we suggest a stronger scalar articulation. More specifically, we suggest to articulate the

structural dimensions of a landscape of care with a vocabulary allowing the analysis of older people's everyday social and material environment, through the concept of landscape of affordances.

In what follows, we explain why thinking in terms of landscapes of care and affordances is helpful for studying aging in place.

2.1. Landscapes of care

Work on landscape of care was not initiated in the specific field of aging studies, though the authors of the seminal text in this domain (Milligan & Wiles, 2010) have worked on aging. It was rather thought more broadly as a 'framework for unpacking the complex relationships between people, places and care' (Milligan & Wiles, 2010, p. 736). This framework has three main characteristics. First, the landscape metaphor indicates a perspective on care which goes beyond the traditional dyad care-giver / care-receiver to envisage care as enacted within a network. Second, it emphasizes that care is shaped by a multiplicity of places (institutions, homes, neighbourhoods) at different scales (from the international to the embodied and inter-personal). Third, landscapes of care are infused with power-laden relations characterised by economic and notably gender-based inequalities.

Considering aging in place as a landscape of care highlights the importance of attending to the whereabouts of care and to the multiple scales involved. Aging at home in Japan for instance is facilitated by migration policies allowing low-paid Filipino nurses to work on a permanent basis in the homes of old people, in a country with a long tradition of very restrictive migration policies. Landscapes of care are also populated by more-than-human elements (to continue with the Japanese example): not only Filipino nurses, but also robots, trees in parks, or sidewalks usable with wheelchairs or walkers.

The diversity of entities that make aging-supportive landscapes of care have been emphasized by the so-called post-human turn in gerontology, consisting in a decentring of the human in aging studies 'in favour of a broader sweep of actors and forces' (Andrews & Duff, 2019, p. 49). Regardless of the debates about whether humanism should be replaced or complemented (Brinkmann, 2017) and the adequacy of the term 'post-human' (we tend to prefer the more precise 'more-than-human'), these approaches contribute, in our view, to enrich an approach of aging in place where 'place' is envisaged in a broad sense, i.e. as made of affective, social and material elements and their assemblage in a continuous process of becoming.

We find particularly fruitful and relevant to our study to analyse how these various resources in a landscape of care can (or cannot) be supported or used. This requires,

we argue, more than what a post-humanist position – which tends to be a quite general 'navigational tool' (Andrews & Duff 2019, p. 47, quoting Rosi Braidotti) rather than an approach or a concept – can offer. We suggest that recent developments in affordance theory can provide the relational language needed to that effect.

2.2. Landscapes and fields of affordances

The relations between subjects and material objects lies at the core of James Gibson's affordance theory (Gibson, 1986). Developing an ecological theory of perception, Gibson approached perception as an embodied and mobile process, contra the Cartesian tradition where the subject was primarily immobile and contemplative. Affordances are for Gibson what sits between the perceiving/acting subject and her/his material environment. Recent work in affordance theory has led Gibson's theory in directions that are interesting for thinking old people's everyday spaces and places that we explored in the context of our study. Chemero (2003) in particular has developed a more relational affordance theory, 'while previous (post-Gibson) attempts to set out an ontology of affordances have typically assumed that affordances are properties of the environment' (Chemero, 2003, p. 182). Chemero argues that affordances 'are relations between particular aspects of animals and particular aspects of situations' (Chemero, 2003, p. 184). While Chemero's theory of affordances is useful for its emphasis on relations, it is restricted to physical action. More recently, Ramsey et al (2016) have extended the conceptualisation of affordances to encompass both physical and 'sociocultural forms of life'. They distinguish between 'natural' and 'conventional affordances'. *Natural* affordances are possibilities for action 'the engagement with which depends on an organism or agent exploiting or leveraging reliable correlations in its environment with its set of abilities. For instance, given a human agent's bipedal phenotype and related ability to walk, an unpaved road affords a trek' (p. 2). *Conventional* affordances are possibilities for action, 'the engagement with which depends on agents' skilfully leveraging explicit or implicit expectations, norms, conventions, and cooperative social practices' (p. 2). Thus, for conventional affordances, interaction with others and understanding how they think and act is crucial. This distinction invites us, when we study older people's everyday lives, to look at how their *relations* with their material, social and affective environment provide them with resources for aging in place. It also implies that these resources are relationally produced often through a *combination* between natural and conventional affordances. For instance, the regular terrace meetings with a glass and snacks that creates social bonds in one of our study sites are resources for aging in place consisting both of a built environment with gardens and terraces *and* of the knowledge and know-how allowing older persons to be part of this specific social situation.

The other useful distinction Ramstead and colleagues propose is between the *landscape of affordances*, which is made of 'the ensemble of available affordances in an environment' and the '*field of affordances*' which corresponds to the affordances with which an organism actually engages (Ramstead et al., 2016, p. 4). In other words, the difference here is between a set of possibilities and those that are activated. Approaching the everyday environment or 'place' of old people as a landscape of affordances means that affordances do not present themselves as discrete elements but rather 'as a matrix of differentially salient affordances with their own structure or configuration' (Ramstead et al., 2016, p. 4). The favourite bench with a view on the valley used by participants in another of our study sites represents a resource in a field of affordances because it is reachable with a walker along a pedestrian path.

Finally, 'the field of affordances changes through cycles of perception and action' (Ramstead et al., 2016, p. 5). This came out clearly in our *in situ* study of participants' fields of affordances: participants' narratives emphasise these changes, due for instance to the loss of a partner or to health problems. Those changes also appear when contrasting the practices and discourses of participants of various ages and conditions. A gym course in another village used to be an important resource for a participant now in her 80s when she was ten years younger, but it's not the case any longer. Material and social environments also evolve: shops close, buildings deteriorate and new ones are built, trees grow, neighbors move… and this also changes the landscapes and fields of affordances. In other words, affordances are always in a state of becoming.

2.3. The developing person

Finally, to account for the dynamic transactions taking place between older persons and their environment we also draw on sociocultural psychology of the life-course. This perspective considers that development is a lifelong process (Elder & Giele, 2009; Levy et al., 2005), and that the becoming of the person can be understood only via the material and semiotic guidance of the environment, both at the micro scale and in larger sociocultural terms (Grossen et al., 2020). However, these environments are themselves produced and transformed via people's activities. Thinking in such terms invites us to consider that people, always unique and embodied, engage in specific activities and interactions, while actively making sense to them, with a history, memories as well as expectations and imagination of alternatives (Zittoun, 2022). It emphasises the fact that landscapes of affordances are not just given, but always made sense of: people act according to what is meaningful to them, in relation both to their history and their imagination of the future. It also invites us to consider that new situations can be more or less familiar, that some newness may be easier to handle than others, that people

have a sense of continuity that can be supported by a very wide range of material and semiotic resources. Such developmental stance sees older persons as not only "aging" in place, but as actively "growing older". Moreover, people can engage with these environments and try to modify them.

In this section, we have suggested that the conceptual vocabulary we propose – landscape of care, natural and conventional affordances, landscape and field of affordances, experiencing and developing – is necessary, first, to embed a study of aging in place in a larger political economy of aging and, second, to closely study, at the other end of the spectrum, how the everyday environment of old people can provide affordances that can be used as resources for growing old in place.

In the next section, we show how such theorisation enabled us to approach an intervention aimed at avoiding the isolation of older persons in a Swiss Canton.

3. A participatory and translational dispositive

Our research took place as the two senior authors of this article were contacted by the Public Health service of the Canton of Neuchâtel in Switzerland to collaborate on a program to prevent the isolation of its older population. We expose here the context of this initiative, how we reframed the problem we were asked to find solutions to, and the research methodology we proposed.

In 2007, the Swiss government published a strategy regarding aging aiming to 'increase the autonomy' of older adults, notably by creating 'neighbourhoods for all ages' (Conseil Fédéral 2007, pp. 43-44). Like many other countries, Switzerland took at that time an explicit policy turn favouring aging in place rather than in retirement homes. This turn was motivated by a mix of humanist momentum to promote the quality of life and independence of older people and of the (quasi-ubiquitous) neoliberal doctrine of a transfer of costs and responsibilities from States to citizens. In a country where in most domains (except sectors such as military defence and foreign affairs) the federal State essentially provides strategies and policy frameworks, legislations and the implementation of policies are effectuated at cantonal (i.e., regional) level. Therefore, if, in recent years, the general trend has been the development of a policy of 'aging in place', the translation of this policy in institutions, laws and action has been quite variegated in Switzerland (Schwiter et al., 2018).

In this context, the coordination of communal action plans for the promotion of older people's health is one of the tools used by Swiss cantons to implement the national strategy. The development of these plans is supported by a publicly and privately sponsored foundation, *Promotion Santé Suisse* ("Swiss Health Promotion"), through

nationwide calls for projects. In 2019, *Promotion Santé Suisse* launched a call for projects aiming to prevent the social isolation of older people. The research on which this article is based was conducted in this context, and was led by a consortium including cantonal authorities, an intercommunal association involved in territorial development, and academics[1]. It was effectuated between 2020 and 2022 in collaboration with older persons, representatives of communes, and civil society organisations.

Our project approached the question of social isolation taking distance from a 'deficit model' in aging and disability studies (Butler & Parr 1999). Rather than focusing on isolation per se, and guided by our theoretical framework, we focused on *resources* used by older persons to accomplish *activities* meaningful to them - mostly involving or allowing social interactions (from gardening to shopping, seeing friends and family) - and on *obstacles* that hinder or complicate the accomplishment of these activities. We defined *activities* as situated and mediated actions regularly accomplished by a person as part of her/his everyday life. These activities are related to physical needs (e.g. eating) and various domestic tasks (e.g. cleaning, shopping), and are often invested affectively by people, reflecting their values and engagements in life (e.g. walking in the forest, doing Tai Chi) (Hviid, 2020). We defined *resources* as persons, objects, experiences, knowledge, technological devices, cultural artefacts, etc., that persons mobilise to support an activity. It is their actual use that turns these elements into resources (Duff, 2012; Gillespie & Zittoun, 2010). We defined *obstacles* as all elements or events hindering (totally or partially) a person's activities, or her/his access to, and use of, resources, and thereby hindering their social interactions. Thus, in order to prevent social isolation, we decided to highlight the activities in which people engage and to orient our proposed interventions toward reinforcing the resources that enable them to be carried out, as well as preventing or overcoming possible obstacles people could meet. To define appropriate interventions from older people's perspective we engaged in a participatory research (Babington, 2017; Benjamin-Thomas et al., 2018) we describe in the following section.

3.1. The dispositive step by step

The steps followed in this participatory research included: defining a working definition of the concept of social isolation of older persons that was central in the project; developing a rationale for choosing study sites; conducting site visits; organising workshops with older people and care workers in the communes; conducting go-alongs

---

[1] In parallel, the Canton of Neuchâtel is engaged in a vast reform to support aging in place, involving the decrease of the number of beds in full time institutions and the development of new forms of housing for older people and other care services (Conseil d'Etat, 2012, 2015, 2021; Gfeller et al., 2022).

followed by interviews; mapping fields of affordances; organising restitution workshops; and, finally, designing local action plans.

The preliminary work was done with a steering committee, including representatives from the health office of the Canton, members of an intercommunal association involved in territorial development, representatives of *Pro Senectute* (a foundation supporting older people in Switzerland, notably via social workers), presidents of communes, and researchers (the authors of this paper). Led by one of the authors, a first discussion aimed to define "social isolation" and develop a shared understanding of objectives and process. The group agreed on a relational definition, according to which isolation of older persons is a 'situation of scarcity of social interactions and/or meaningful activities, which the person may perceive as problematic, and that may have negative consequences on their health'[2]. This grounded definition aimed to account for the wide variety of situations and experiences the members of the panel had encountered in the region, from old people living in remote farms yet not suffering from loneliness (because they chose the situation and were occasionally helped by neighbours or the mailman), to people living isolated in urban housing blocks without elevators.

In a second step, the research group chose not to focus on social isolation deduced a priori from specific residential situations, but rather to focus on how in the region people managed to avoid isolation. As a consequence, our research documented the diversity of modes of lives of older persons and their daily activities, and the variety of landscapes of affordance, both natural and conventional, that people encounter in the region. The steering group selected three communes that were contrasted enough to offer a representative variation of lifestyles in the canton: a rural commune, a small peripheral industrial town, and a suburban neighbourhood of the canton's main city. Sites were chosen to maximise variability across cases in terms of location, topography, size, presence of services and transport. Such variability was used to envisage a diversity of situations and thus interventions apt to address this diversity rather than one-size-fits-all solutions. This choice was functional to the objective of the research: developing a toolbox for the design of locally-relevant action plans at commune level for older persons, that could be proposed to all communes in the Canton.

Data collection consisted in three main steps, distributed over a year: an exploratory observation in the three communes, inaugural workshops, go-along interviews followed by interviews combining biographical questions and problem-centred questions.

---

[2] « L'isolement des seniors est une situation de rareté d'interactions sociales et d'activités signifiantes, ressentie comme un manque ou pouvant induire une répercussion sur la santé »

Figure 2: Photographs taken during the preliminary mapping of landscapes of affordances in the study sites.

Figure 2f: Photographs taken during the preliminary mapping of landscapes of affordances in the study sites.

The aim of exploratory observation was to get a sense of the places and landscape of affordances: observing elements (or absence thereof) such as sidewalks, presence of parks, viewpoints, shops, post offices, garbage collectors and cafés (Figure 2).

Three inaugural workshops, one in each commune, were organised to complement this preliminary mapping, and start moving from *landscapes* to *fields* of affordances. Older persons were invited via local networks: the commune, local newspapers, restaurants, social workers, etc. About 20 people participated in each site (older persons and some care workers). The aim of the workshops was also to launch the study as a public event, to create interest and participation in the process. As the meetings took place during Covid-19 restrictions, participants were grouped in tables of 3 to 5. At each table were two large printouts of maps at two scales, one of their village or neighbourhood, the second of the wider commune in which the village or neighbourhood is located, and large paper sheets with pens. After a short introduction given to the whole audience, participants at each table were asked to describe their activities, the obstacles they met when conducting them, and resources they could use to achieve them, and to mark them using three colours on the maps (Figure 3). This step enabled us both to get a first collective description of people's fields of affordances, and once these were synthesised, a first map of fields of affordances in each commune.

Figure 3: Discussion over the map in one of the launching participatory workshops

The third step of the research aimed to map more precisely fields of affordances on the basis of data collection on participants' activities. This phase constituted the core of the data collection. Drawing on previous work by one of the team members on mental health (Söderström 2019), it involved go-along interviews.

13

Participants to the go-alongs were identified at the first workshop as willing to participate further in the project and by snowballing. Each participant (ten per site) was accompanied by two members of the research team for a walk corresponding to their daily (or at least regular) activities or tour (Figure 4). The average age of go-along interviewees was 75. The youngest participant was 68 years old, and the oldest 93. For each site, we created a group of 10 participants with a balance in each in terms of age, gender and socio-economic background. The relatively small sample is due to the fact that go-along interviews with older persons are very time-intensive.

Pictures (300 in total) were taken of significant places, obstacles or natural/conventional affordances and the conversations were recorded. This process enabled us to trace a map of the participants' fields of affordances and their lacks. For example, a person would bring us to her place of preferred walk, show us the adequacy of a ramp installed on the slope (part of the landscape of affordance), and explain that the only available bench, needed at mid-walk, was located in the sun, therefore not affording to sit there in summer and making this walk impracticable. Similarly, participants mentioned the problem of the closure of the post office on the main street of one of the communes. This closure implies a reconfiguration of the landscape of affordances: people now hesitate to go to the shop at the far end of the street, without the stop offered by the post office.

After the go-along, semi-structured interviews were carried out at people's place. This was also a means to include participants' homes in their fields of affordances: significant objects, the organisation of domestic space, obstacles such as stairs or a badly placed oven, resources such as a ramp. We thus collected 30 (10 per site) go-along interviews with older persons followed by a semi-structured interview, which lasted between 105 min and 230 minutes, during which pictures were taken. To complement data collection we interviewed 35 persons regularly in contact with older people – café owners, social workers, priests, nurses –and made observations in the study sites during 3 months of fieldwork. The empirical material (900 pages of transcripts and 300 photographs) was stored and then analysed using the Atlas.ti software.

The next step, the translation of research results into action plans, involved other actors in the landscape of care: the canton, the communes and crucially a partner coordinating these various scales of the State.
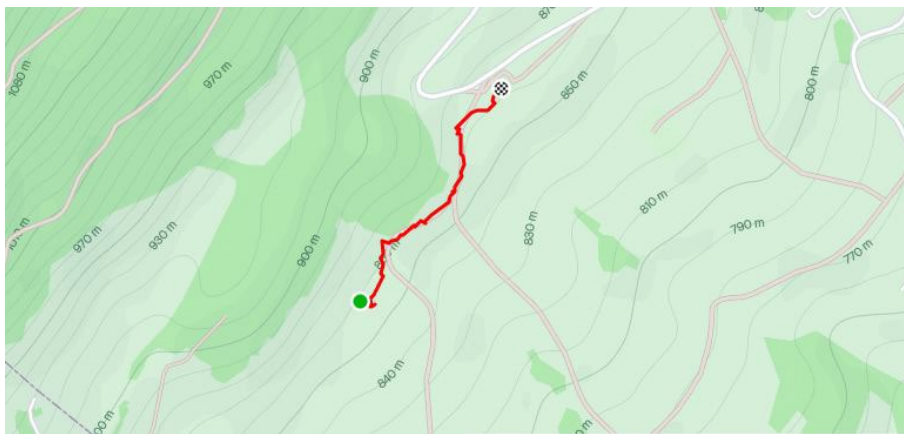
Figure 4: A go along interview with Anna (86) and the map of her habitual daily walk

3.1. Translating research results into interventions

The translational process mingled, as we will see below, with further steps in the participatory process. It included the production of publicly available maps of the landscapes of affordances of each commune, a report, the definition and implementation of specifically designed measures and a second series of participatory events.

First, synthetic maps locating activities, resources and obstacles for each site were produced from using the Geographic Information System of the Neuchâtel Canton. Zoom in and zoom out functionalities allow a multi-scalar vision of these elements (Figure 5). These maps also drew on the six workshops that took place in each site – one before and one after the go-along in each of the three communes. These maps offer, to interested citizens or stakeholders, a visualisation of the landscape of affordances in each commune for its aging population usable for site-specific interventions.
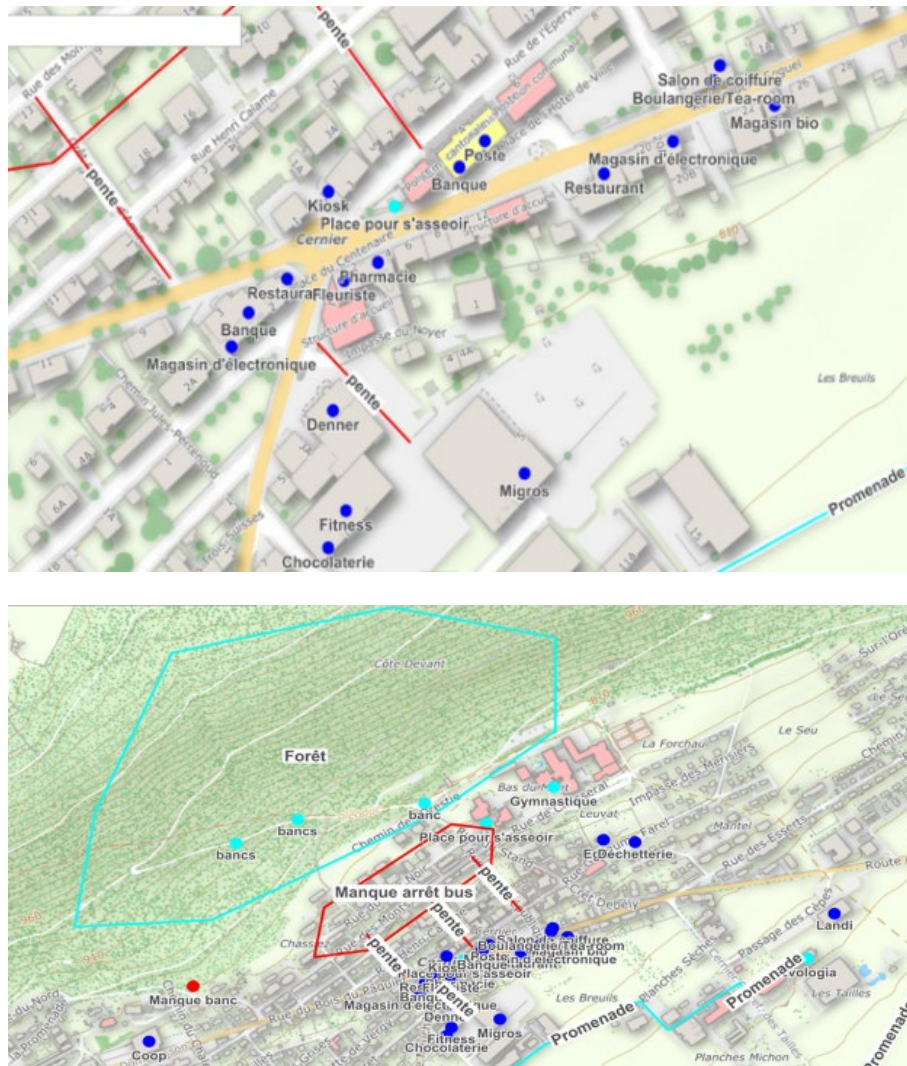

Figure 5: The centre of Cernier and a broader view of the town and the main features of its field of affordances for participants in the study.

Second, the translation of results included a research report for the communes (Authors, 2022) and a repertoire of possible actions in each site. The report describes the activities undertaken by older persons in each commune, the main obstacles they meet and the resources they develop. The report concluded with recommendations regarding features

of the landscape of affordances that should be preserved, valorised or reinforced – e.g., natural affordances such as benches and handrails in slopes – and should be created, so as to reinforce older people's fields of affordances. Some of these features were common to the three communes: a need for better possibilities of mobility, access to shops or doctors, or to recycling centres. There was also a common need for indoor places to meet that could accommodate different activities (cafés, or an open locale). Other features were more specific to a commune: the locale could be a shared garden, specific routes needed new public lighting, etc.

The translational process was taken further by the intercommunal association, which was part of the action-research consortium. The organisation is a regular interlocutor of the local state (both at cantonal and communal level) in different public policies. It assisted and followed the development of the research with the communes and the study participants from the start. Therefore, it was, on the one hand, in a good position to translate research results into a language and tools easily manageable by institutional actors. On the other hand, it was able to connect our locally grounded research with other scales and actors of the landscape of care, such as the coordination of communal public health officials. Drawing on this experience, this partner organisation designed interventions that drew on research results responding to identified needs, and also on measures developed in other Cantons. This resulted in a catalogue of 67 measures, each of them described as a technical data sheet, with examples, guidelines, pictures and references.

This process was also participatory: a workshop was organised in each commune to present research results and possible site-specific interventions. Participants were invited to react or state non-identified needs. More generally, and interestingly, they could directly address their local representative, often informing them about features of their daily lives these representatives ignored. For instance, in one commune, participants informed the president of their commune, to his surprise, that they had to pay full price for public transport, which often represented more than the price of the daily food allowance, reason for which they could not go shopping in the city centre. Thus, these workshops, organised like 'hybrid fora' (Callon et al. 2009), functioned not only as a means to further enrich the action-research, but also as an unusual platform of exchange between older people and local officials.

In the wake of these workshops, each commune could choose to implement one of the many proposed interventions. This intervention was partly funded by the project. For instance, as alluded to in our introductory vignette: in the most isolated village of the rural commune, in which there is no public café or shop and where the post office had been

closed, the commune decided to renovate the former school, located in the centre of the village, and to turn it into a meeting venue for older persons.

Finally, a forum was organised where all communes of the Canton were invited to encourage a scaling up from the three pilot sites to the regional level.

4. Reconfiguring the landscape of affordances to support growing old in place

The participatory and translational dispositive we planned and accompanied aimed to prevent the isolation of older persons in the Canton of Neuchâtel. Rather than intervening at the individual level – e.g., targeting people suffering from loneliness – we considered the landscape of care at the scale of the Canton. We used three contrasting study sites to map out the local landscapes of affordances enabling older persons to accomplish their daily activities and maintain a social life.

Implementation is now in the hands of the communes but also of the broader network of actors involved in (and partly constituted by) the project. Some concrete measures were quickly implemented. In the rural commune, a former school was reopened and turned into a multi-use meeting place for aging persons in the commune. In the small town, pavements were remade so as to make them less slippery, while handrails and sitting spots were added. The same commune has opened a weekly class on the use of digital technologies. In the urban neighbourhood, a restaurant has introduced regular meetings for older people.

An action-research like the one we describe in this article is always at risk of being a temporary circus: everything vanishes when the circus (and its sponsors) leave the ground. To avoid this 'circus effect' the Canton offered a financial support for one intervention in each commune involved in the project while the intercommunal association has organised workshops and training for all the communes of the Canton. The aim of this training is to provide participants with a usable methodology based on each commune's landscape of affordances.

In hindsight, our participatory action-research process had two main outcomes, a voluntary and an involuntary one. The voluntary outcome is that, thanks to the coordination of actors of the landscape of care at the cantonal level, we were able to design and implement targeted measures which reinforced and enriched the communes' landscape of affordances for old persons, thus creating better conditions for people to grow older in place. The involuntary outcome of this process is that it produced, in itself, a new set of conventional affordances: older persons who took part in a workshop during the Covid-19 pandemic could meet other persons in safe conditions; older persons came

to know each other, and know about activities in their regions; commune leaders had, sometimes for the first time, a dialogue with their older citizens. In other words, all participants came to expand their fields of affordances during the action-research process.

Finally, while we were conducting the research and taking part in the implementation of its results, we were not able to identify with precision how it was contributing to wider debates. This article is our effort to understand the lessons we learned. First, we see our project as an attempt to bridge two aspects insufficiently present in recent conceptualisations of aging in place: the wider structural conditions in which local lives are lived and a precise vocabulary to describe and act on the experience of local conditions of living. Second, and more precisely, our research has taught us that landscapes of affordances and landscapes of care must be connected to improve how growing old in place can qualitatively develop. Third, we experienced that the translation of our analysis into measures supporting people's activity requires a more-than-local network of actors and institutions which can both use existing experience, scale it up and create a platform of exchange. It is thanks to a complex network of coordination between commune representatives, the cantonal health office, an intercommunal association, but also carers, social workers, and associations supporting old people, that measures could be defined and implemented. Reopening a post office or a school, organising shared meals, or even offering a targeted course to use mobile phones, requires the identification of needs, of local offers and opportunities, and overall, the coordination of public and private services, companies and volunteering associations at different scales.

5. Conclusion

For both policy-makers and academics, aging in place has become a mantra. To support the quality of life of people growing old, it is crucial to consider the totality of their living environment. Our approach aimed to deepen the idea of aging in place, exploring it as a relational and distributed process. The notions of landscape of care and field of affordances situate the development of person growing older in their more-than-human lived environment. Our article also insists on attending to the agency and purpose of older people: how they conduct their activities and meaningful interactions in more or less liveable landscapes of affordances. If most of these landscapes of affordances emerge spontaneously with time, it does not take much to put them off balance: transformations in the environment, temporary frailty, warmer temperatures. Yet, these landscapes also need to evolve to correspond to changing needs while growing older, and their evolution can, to some extent, be planned. We have argued that analysing fields of affordances requires a participatory approach to capture how older persons daily

milieu presents itself as a world of possible activities, resources and obstacles, and that designing a landscape of affordances requires a translational approach connecting local practices with a wider landscape of care. Importantly, our project shows that improving the life of people growing old does not require grand projects: modest interventions can support the quality of life of many – yet these interventions need to be identified, designed, and implemented with care, following a participatory and multi-scalar process. We have seen that, when well designed, such participatory and translational process gets its own momentum: not only are measures implemented successfully, but a large network of social actors at different scales, from policy makers to users, are likely to become more aware and active in the transformation of an aging population's everyday environment.

6. Bibliographie

Andrews, G J, Cutchin, M, McCracken, K, Philips, D R, & Wiles, J L. (2007). Geographical gerontology: The constitution of a discipline. *Social Science & Medicine*, *65*, 151-168.

Andrews, G., & Duff, C. (2019). Understanding the vital emergence and expression of aging: How matter comes to matter in gerontology's posthumanist turn. *Journal of Aging Studies*, *49*, 46–55. https://doi.org/10.1016/j.jaging.2019.04.002

Babington, P. (2017). Ageing Well in Bournville: A Participative Action Research Project. *Rural Theology*, *15*(2), 84–96. https://doi.org/10.1080/14704994.2017.1373472

Benjamin-Thomas, T. E., Corrado, A. M., McGrath, C., Rudman, D. L., & Hand, C. (2018). Working Towards the Promise of Participatory Action Research: Learning From Ageing Research Exemplars. *International Journal of Qualitative Methods*, *17*(1), 1609406918817953. https://doi.org/10.1177/1609406918817953

Bigonnesse, C., & Chaudhury, H. (2022). Ageing in place processes in the neighbourhood environment: A proposed conceptual framework from a capability approach. *European Journal of Ageing*, *19*(1), 63–74. https://doi.org/10.1007/s10433-020-00599-y

Bigonnesse, C., Beaulieu, M., & Garon, S. (2014). Meaning of home in later life as a concept to understand older adults' housing needs: Results from the 7 age-friendly cities pilot project in Québec. *Journal of Housing for the Elderly*, *28*(4), 357–382. https://doi.org/10.1080/02763893.2014.930367

Brinkmann, S. (2011). Dewey's neglected psychology: Rediscovering his transactional approach. *Theory & Psychology*, *21*(3), 298–317. https://doi.org/10.1177/0959354310376123

Brinkmann, S. (2017). Humanism after posthumanism: Or qualitative psychology after the "posts". *Qualitative Research in Psychology*, *14*(2), 109–130. https://doi.org/10.1080/14780887.2017.1282568

Butler, R, & Parr, H. (1999). Mind and body spaces: geographies of illness, impairment and disability. Routledge.

Callon, M, Lascoumes, P, & Barthe, Y. (2009). Acting in an Uncertain World: An Essay on Technical Democracy. MIT Press.

Chemero, A. (2003). An outline of a theory of affordances. *Ecological Psychology*, *15*(2), 181–195. https://doi.org/10.1207/S15326969ECO1502_5

Conseil d'Etat. (2012). Rapport du Conseil d'Etat au Grand Conseil à l'appui d'un projet de loi portant modification de la loi de santé (LS) (Planification médico-sociale pour les personnes âgées) (12.013). Conseil d'Etat, Canton de Neuchâtel.

Conseil d'Etat. (2015). Rapport d'information du Conseil d'Etat au Grand Conseil concernant la réalisation et les perspectives de la planification médico-sociale (15.026). Conseil d'Etat, Canton de Neuchâtel.

Conseil d'Etat. (2021). Rapport du Conseil d'État au Grand Conseil à l'appui d'un projet de loi sur l'accompagnement et le soutien à domicile (LASDom) (21.021). Conseil d'Etat, Canton de Neuchâtel.

Conseil Fédéral (2007). *Stratégie en matière de politique de la vieillesse*. Berne: Confédération Suisse

Cornish, F., & Gillespie, A. (2009). A pragmatist approach to the problem of knowledge in health psychology. *Journal of Health Psychology*, *14*(6), 800–809.

Drolet, B. C., & Lorenzi, N. M. (2011). Translational research: Understanding the continuum from bench to bedside. *Translational Research: The Journal of Laboratory and Clinical Medicine*, *157*(1), 1–5. https://doi.org/10.1016/j.trsl.2010.10.002

Duff, C. (2012). Exploring the role of 'enabling places' in promoting recovery from mental illness: A qualitative test of a relational model. *Health & Place*, *18*(6), 1388–1395. https://doi.org/10.1016/j.healthplace.2012.07.003

Elder, G. H., & Giele, J. Z. (Eds.). (2009). *The craft of life course research*. Guilford Press.

Forsyth, A., & Molinsky, J. (2021). What is aging in place? Confusions and contradictions. *Housing Policy Debate*, *31*(2), 181–196. https://doi.org/10.1080/10511482.2020.1793795

Gfeller, F., Grossen, M., Cabra, M., & Zittoun, T. (2022). Réformes politiques face au vieillissement démographique: Diversité des perspectives dans la mise en œuvre d'une politique socio-sanitaire. *Revue pluridisciplinaire d'Education par et pour les Doctorant-e-s*, *1*(1), Article 1. https://doi.org/10.57154/journals/red.2022.e990

Gfeller, F., Zittoun, T., Grossen, M., & Cabra, M. (2021). *L'offre de logement pour personnes âgées dans le canton de Neuchâtel. Évolution, état des lieux, tensions* (Rapport de Recherche HomAge No. 1). Université de Neuchâtel.

Gibson, J. J. (1986). The theory of affordances. In *The ecological approach to visual perception* (Original 1979, pp. 127–143). Lawrence Erlbaum.

Gillespie, A., & Zittoun, T. (2010). Using resources: Conceptualizing the mediation and reflective use of tools and signs. *Culture & Psychology*, *16*(1), 37–62. https://doi.org/10.1177/1354067X09344888

Grossen, M., Zittoun, T., & Baucal, A. (2020). Learning and developing over the life-course: A sociocultural approach. *Learning, Culture and Social Interaction*, 100478. https://doi.org/10.1016/j.lcsi.2020.100478

Hviid, P. (2020). Aged experience – A cultural developmental investigation. *Learning, Culture and Social Interaction*, 100386. https://doi.org/10.1016/j.lcsi.2020.100386

Levy, R., Ghisletta, P., Le Goff, J.-M., Spini, D., & Widmer, E. (2005). Incitations for interdisciplinarity in life course research. In R. Levy, P. Ghisletta, D. Spini, & E. Widmer (Eds.), *Towards an Interdisciplinary Perspective on the Life Course* (pp. 361-391 %@ 0762312513). Elsevier.

Milligan, C., & Wiles, J. (2010). Landscapes of care. *Progress in Human Geography*, *34*(6), 736–754. https://doi.org/10.1177/0309132510364556

Pani-Harreman, K. E., Bours, G. J. J. W., Zander, I., Kempen, G. I. J. M., & Duren, J. M. A. van. (2020). Definitions, key themes and aspects of 'ageing in place': A scoping review. *Ageing & Society*, 1–34. https://doi.org/10.1017/S0144686X20000094

Parnell, S., & Pieterse, E. (2016). Translational global praxis: Rethinking methods and modes of african urban research. *International Journal of Urban & Regional Research*, *40*(1), 236–246. https://doi.org/10.1111/1468-2427.12278

Ramstead, M. J. D., Veissière, S. P. L., & Kirmayer, L. J. (2016). Cultural affordances: Scaffolding local worlds through shared intentionality and regimes of attention. *Frontiers in Psychology*, *7*. https://doi.org/10.3389/fpsyg.2016.01090

Rogers, W. A., Ramadhani, W. A., & Harris, M. T. (2020). Defining aging in place: The intersectionality of space, person, and time. *Innovation in Aging*, *4*(4), igaa036. https://doi.org/10.1093/geroni/igaa036

Schwiter, K., Berndt, C., & Truong, J. (2018). Neoliberal austerity and the marketisation of elderly care. *Social & Cultural Geography*, *19*(3), Article 3. https://doi.org/10.1080/14649365.2015.1059473

Söderström, O. (2019). Precarious encounters with urban life: the city/psychosis nexus beyond epidemiology and social constructivism. *Geoforum*, *101*, 80-89.

Wiles, J. L., & Andrews, G. J. (2020). The meanings and materialities of 'home' for older people. *Generations*, *44*(2), Article 2.

Wiles, J. L., Leibing, A., Guberman, N., Reeve, J., & Allen, R. E. S. (2012). The meaning of "aging in place" to older people. *The Gerontologist*, *52*(3), 357–366. https://doi.org/10.1093/geront/gnr098

Zittoun, T. (2022). A sociocultural psychology of the life course to study human development. *Human Development*, *66*(4–5), 306–324. https://doi.org/10.1159/000526435

Zittoun, T., & Baucal, A. (2021). The relevance of a sociocultural perspective for understanding learning and development in older age. *Learning, Culture and Social Interaction*, *28*, 100453. https://doi.org/10.1016/j.lcsi.2020.100453

MAPS MAISON D'ANALYSE DES PROCESSUS SOCIAUX