

1 Embodied and Sensory Experiences of Therapeutic Space: 2 Refugee Place-making within an Urban Allotment

3 **Abstract**

4 This article extends theorising on how spaces act therapeutically by using the lens of
5 sensory and embodied ethnography to explore refugee place-making within an urban
6 allotment located in the North West, UK. Findings suggest being physically present
7 when allotment tending has potential to be therapeutic without the need for verbal
8 communication. Physical activity distracted participants from internal stress.
9 Sensory nostalgia provided continuity with past and present selves and the
10 anthropomorphism of plants acted as a reminder to nurture the self and allowed for
11 cathartic telling of stories. Findings are important if places of restoration and healing
12 are to be sought out for refugees.

13 **Keywords**

14 Place-making, therapeutic landscapes, refugees, embodiment, ethnography

15 **1. Introduction**

16 Those who have been forced to flee their country embody the relationship
17 between health and place (Sampson and Gifford, 2010). Displacement results in the
18 destruction of connections to place (Kibreab, 1999; Sampson and Gifford, 2010).
19 Furthermore, once in new countries, refugees often experience a range of mental
20 health issues (Turrini et al., 2017) and place-making as a refugee can be fraught with
21 social tension. Thus, exploring and understanding spaces of restoration and healing

22 for refugees is important to assist in improving the well-being and experiences of
23 refugees within new countries.

24 Places of restoration and healing are largely understood through ‘therapeutic
25 landscapes’, a term first coined by Wilbert Gesler (1992; 1993; 1996) to describe
26 where the environment and human perception interact and produce a therapeutic
27 atmosphere. In recent years, scholars have criticised the field for lacking in
28 theorisation of actually *how* places can be therapeutic (Conradson, 2005; Duff, 2011;
29 Pitt, 2014). In response to this critique, scholars have explored the role of sensory
30 and embodied experiences in how a place may act therapeutically (Doughty, 2013;
31 Pitt, 2014; Gorman, 2017; Wang, 2018). However, Pitt (2014) argues that the moving
32 body remains largely under-theorised in well-being geographies. Furthermore,
33 Gorman (2017, pp. 27) stated that the role of embodied and sensorial experiences in
34 the development of therapeutic landscapes was an area still ‘ripe’ for additional work.
35 Thus, there is room for further exploration of exactly how sensory and embodied
36 interactions with the natural environment contributes to experiencing a place as
37 therapeutic. Therefore, the aim of the current paper is to expand on this emerging
38 conversation. I use Sarah Pink’s (2015) lens of sensory ethnography to explore
39 refugees’ subjective sensory and embodied encounters with an allotment project. The
40 paper begins by reviewing and linking the relevant literature on the people-place
41 relationship; therapeutic landscapes and the role of sensory and embodied
42 experiences in the development of therapeutic landscapes. This is followed by
43 detailing the specific methodology and methods used, before finally discussing the
44 findings.

45 1.1. Displacement and place.

46 Over the years, views of the relationship between displaced people and place
47 have shifted (Brun, 2001). The essentialist outlook of the people-place relationship
48 views the relationship as naturalised (Brun, 2001). People and culture are observed
49 as being firmly rooted within place, which results in places becoming fixed and
50 unchanging locations (Massey, 1994). Essentialist frameworks trap identity in places
51 left behind and a commonly held view resulting from this is that displacement
52 constitutes a major psycho-pathological problem where roots are an existential part
53 of identity (Brun, 2001). However, states of displacement, homelessness and
54 movement resulted in new ways of conceptualising the people-place relationship and
55 this naturalised assumption has been deterritorialized (Malkki, 1992; Massey, 1994;
56 Gupta and Ferguson, 1997; Brun, 2001; Turton, 2004). Deterritorialization in this
57 context refers to the separation of culture, people and place by removing cultural
58 subjects and objects from specific locations (Gupta and Ferguson, 1997; Brun, 2001).
59 Deterritorializing the people-place relationship considers the way globalisation has
60 diminished the limitations of distance (Massey, 1994) and posits a view of the
61 relationship as increasingly mobile. While deterritorialization has been important, as
62 it shifts away from the notion of ‘once a refugee always a refugee’, Brun (2001)
63 recognised where this view poses problems. Deterritorialization can lead to a
64 romanticising of the effects of globalisation (Brun, 2001). Arguably, this view can
65 ignore the hardship faced when being forced to leave one’s homeland, and the
66 significance of attachment to places left behind. As Kibreab (1999) argues,
67 involuntary displacement marks a very real loss of social, economic and political
68 standing that should not be ignored. Furthermore, ‘deterritorialization’ is
69 paradoxically present in a world that continues to distribute rights and social
70 membership along territorial boundaries (Sampson and Gifford, 2010). In response,
71 Brun (2001) suggested a re-territorialization of the relationship. This posits a strong

72 connection, on the part of displaced persons, to places left behind and recognises the
73 trauma of displacement. However, the possibility of building connections to places of
74 resettlement is also acknowledged (Brun, 2001; Sampson and Gifford, 2010). Using
75 re-territorialization as an analytic concept represents the spatial strategies that
76 displaced people engage in when being physically present in one place, whilst feeling
77 a sense of belonging to another place (Brun, 2001). It is now widely recognised that
78 refugees are active in their re-emplacement process, largely through place-making,
79 where local and transnational membership is interwoven (Brun, 2001; Turton, 2004;
80 Sampson and Gifford, 2010; Lambert-Ward, 2014; O'Neill, 2018). Viewing a
81 refugee's relationship to place as re-territorialized, and the role of place-making, is
82 quintessential to understanding how particular places may act therapeutically for
83 refugees. This is due to the nature of 'therapeutic landscapes'. As the next section will
84 detail, places do not possess inherent therapeutic qualities, rather they are created,
85 relational and subjective. Using re-territorialization as an analytic concept to
86 understand the complex spatial strategies and place-making activities refugees
87 engage in to create a sense of place contributes to understand how an allotment can
88 be experience therapeutically by refugees. The following section outlines the
89 therapeutic landscapes concept and the role of place-making in the development of
90 such landscapes.

91

92 1.2. Therapeutic landscapes and place-making

93 'Therapeutic Landscapes' (Gesler, 1992; 1993; 1996) are defined as places
94 where 'physical and built environments, social conditions and human perceptions
95 combine to produce an atmosphere which is conducive to healing' (Gesler, 1996, pp.
96 96). Williams (1999) brought together the first edited volume of research, which at

97 that time mainly concentrated on the literal relationship between health and place,
98 focusing on ‘extraordinary’ places with healing potential (Bell, 2018). Soon after,
99 researchers began to also explore health promoting sites, and the potential
100 therapeutic value of everyday space (Bell, 2018). For example Milligan et al. (2004),
101 who explored whether cultivation of a garden plot may offer a simple way of
102 improving well-being in older people and, more recently, Bell et al. (2015) who
103 highlighted the therapeutic influence of everyday interaction with the coastal
104 environment. Milligan et al.’s (2004) study with a distinct group (older people)
105 draws attention to the subjective nature of therapeutic space experience. Therapeutic
106 spaces were initially treated as having innately therapeutic qualities. However,
107 evidence suggesting that a place may be therapeutic for some but stress inducing for
108 others challenged such an assumption (Pitt, 2014; Bell, 2018). For example, Milligan
109 and Bingley (2007) explored young people’s experiences of woodland. They found
110 young people’s experience of woodland as therapeutic was dependant on a number of
111 subjective factors, including early childhood experiences or parental fears.
112 Furthermore, for some of the young people dirt and insects had an adverse impact on
113 the potential therapeutic encounter. A further example can be drawn from the
114 OPENspace research centre which advocates for inclusive access to the outdoor
115 environment for all. The centre works to understand the barriers experienced by
116 different users, particularly from disadvantaged groups with an emphasis on a
117 relational understanding of environment perception (Ward-Thompson et al., 2010).
118 Through a number of research projects, the OPENspace research centre, has further
119 highlighted the subjectivity of place experience (Ward-Thompson et al., 2010).
120 Evidence such as this supports the claim by Conradson (2005) that a place
121 experience is never guaranteed to be therapeutic, thus, there is no definitive criteria
122 for therapeutic places.

123 Literature on place-making can be drawn on to further understand the
124 relational and subjective nature of therapeutic spaces. Casey (2001) claims that
125 places not only *are* but also *happen*. Places *happen* by the conscious experience, and
126 day to day activity of those that create them. Place is constituted through reiterative
127 social practice, being made and re-made on a daily basis through place-making
128 activities (Cresswell, 2004). Thus, therapeutic landscapes may be understood as
129 being sought out through the place-making activities of those who use such space
130 (Scannal and Gifford, 2010). Therefore, the way that refugees develop and
131 experience therapeutic space is underpinned by their configuration of the people-
132 place relationship and unique place-making activities they engage in.

133 However, this relational perspective on therapeutic landscapes makes it
134 difficult to know how to shape places to enhance well-being, and *how* place
135 experiences may be healing or therapeutic has been undertheorized (Duff, 2011;
136 Rose, 2012; Pitt, 2014). In response scholars are attempting to address these gaps in
137 the understanding of *how* places act therapeutically. One area of significant
138 contribution is the role of sensory and embodied place experiences. This literature is
139 detailed in the following section.

140 1.3. Sensory experience, embodiment and health

141 Sensory and embodied experiences of place contribute to an understanding
142 how a place may act therapeutically. This is because in regard to health, the body is
143 not only an object for treatment but also an active subject in treatment and the
144 therapeutic meaning is not a state solely represented in the mind but emerges from
145 an interaction between body and place (Wang et al., 2018). Foley (2011) argued that
146 body practice and sensory experience is an important factor in the ability of a space

147 to become a site of healing. Thus, Doughty (2013) has examined mobile therapeutic
148 landscapes via a walking group in the UK. The findings suggested that the walking
149 group was a supportive social space through the shared embodied movement and
150 social relations that played out within the environment (Doughty, 2013). Pitt (2014)
151 further delved into the role of the moving body in the experience of a place as
152 therapeutic, whilst exploring community garden projects. She drew on the concept of
153 'flow', the way a person may become so absorbed in a physical activity that alternate
154 concerns and stresses can be temporarily forgotten (Csikszentmihalyi, 2002). She
155 argued for the physical activity carried out within a community garden as what
156 constituted the gardens therapeutic ability. Doughty's (2013) and Pitt's (2014) work
157 highlight where exploring the role of the moving body interacting with the natural
158 environment gives valuable insight into *how* places act therapeutically and both
159 argue for a more mobile understanding of therapeutic space.

160 Others have focused more on the sensory element of embodied experience.
161 For example, Milligan et al. (2004) noted the significance of sensory experiences in a
162 gardens ability to be therapeutic for older people. Butterfield and Martin (2016) also
163 discussed how the sensory richness of place affords opportunity for the emergence of
164 therapeutic effects when researching the environment of cancer support centres.
165 Gorman (2017) provided more insight into exactly *how* these sensory experiences
166 become therapeutic by focusing on one particular sense. He explored the role of
167 smell within Community Supported Agricultural projects. Observations were made,
168 such as the absence of familiar scents and array of new scents and Gorman (2017)
169 argued that these were perhaps what made the farm therapeutic: through its vast
170 difference from normal day to day activities and senses. Additionally, Wang et al.
171 (2018) again focused on one sense, touch, to explore sand therapy. Findings
172 suggested participants sought painful haptic sensations and subjective sensory

173 experiences coupled with Chinese cultural beliefs of yin-yang balance generated
174 therapeutic experiences.

175 All these studies support the idea of ‘therapeutic sensescapes’, where sensory
176 and embodied experiences of place can generate healing effects (Wang et al., 2018).
177 Despite this engagement ‘therapeutic sensescapes’ remains a relatively young field of
178 enquiry (Blunt, 2007; Doughty 2013), and are ripe for further research (Gorman,
179 2017). Therefore, the current article follows on the idea of sensory and embodied
180 experiences constituting *how* places act therapeutically with a specific focus on
181 refugee populations. Furthermore, Wang et al. (2018) make a particularly important
182 point: a need to explore more about the relations between sensory feelings and
183 healing in the specific socio-cultural contexts. Thus, understanding refugees
184 relationship with place and using re-territorialization as an analytical concept was
185 particularly important to the exploration of the allotment as a therapeutic space for
186 this population.

187 The following section details literature on the benefits of allotment gardening
188 for refugee and migrant populations. Drawing on this literature can begin to build a
189 picture of how an allotment can act therapeutically for refugee populations.

190

191 1.4. Allotments, health and refugees.

192 Gardening and allotment tending as a focused occupation has been found to be
193 effective in improving mental well-being (Whatley et al., 2015) and physical health
194 (Söderback et al., 2004; Verra et al., 2012). Various studies have also explored the
195 therapeutic elements of allotment tending and gardening with populations who may
196 not have initially engaged as a form of ‘therapy’. These qualities include tackling
197 social isolation; reducing stress levels; improving mood and self-esteem and its

198 restorative and nurturing elements improving general well-being (Milligan et al.,
199 2004; Hawkins et al., 2013; Wood et al., 2016; Soga et al., 2017).

200 The role of allotments and gardening with migrant populations has been
201 explored and therapeutic qualities identified. For example, Peña (2006), examined
202 participation in South Central Farmers Feeding Families, a grassroots organisation
203 in the US of 360 families. The farm was found to be a place of empowerment and
204 autonomy. For marginalized groups promoting empowerment and autonomy may be
205 understood as therapeutic. Furthermore, research has found that allotment tending
206 for refugees promoted social inclusion, physical health and autonomy (Davies, 2008;
207 Bishop and Purcell, 2013). Given that many refugees come from agrarian
208 backgrounds or at least have experience in subsistence living, allotments can also
209 make an unfamiliar place familiar and preserve culture, (Corlett et al., 2002; Pena,
210 2006; Harris et al., 2014; MacKenzie, 2016; Lambert-Ward, 2014).

211 Although a number of studies have identified therapeutic qualities of
212 allotment tending and gardening for migrant populations, this exploration is seldom
213 encompassed by the theoretical framing of ‘therapeutic landscapes’. Furthermore,
214 the importance of sensory and embodied experiences in migrant place-making has
215 been recognised (see for example Dudley, 2010). However, this is also not
216 theoretically framed by the ‘therapeutic landscapes’ concept. Thus, the current paper
217 aims to bridge the gaps in scholarship between refugee sensory and embodied place-
218 making, and where the re-territorialization of the people-place relationship fits
219 within this conversation, and allotments as therapeutic landscapes for refugee
220 populations. Additionally, it aims to contribute to emerging conversations on the role
221 of sensory and embodied experiences in *how* a space acts therapeutically. In doing
222 so, this paper extends a better understanding of how to create and seek out
223 therapeutic landscapes that may have the potential to improve the well-being of

224 refugee populations. The following section outlines the specific methodology and
225 methods used to study participants sensory and embodied experiences.

226 **2. Methodology: Sensory Ethnography**

227 The field site for this research was an urban allotment in the North West, UK. The
228 allotment is part of a wider charity that aims to provide social, practical and
229 emotional support and advocacy for refugees and asylum seekers. Ethical approval
230 was obtained from the university's ethics committee and from the gate-keeper.
231 Sensory ethnography, in addition to conventional ethical considerations (informed
232 consent, voluntary participation and the right with withdraw), affords several ethical
233 considerations unique to the methodology. For example, traumatic events can be
234 encoded into memory by the senses. Therefore, senses can trigger flashbacks from
235 the past so that sensory memories do not always bring about positive nostalgia.
236 Throughout fieldwork being aware of this potential to cause distress remained at the
237 forefront of my mind and I was careful to act responsibly and prioritise the well-
238 being of participants throughout. Pink's (2015) approach to sensory research raises
239 another ethical and moral consideration. Her approach stresses the importance of
240 collaboration and engaging participants in the project rather than viewing
241 participants as objects of an experiment. Methodologically, sensory ethnography
242 does not necessarily aim to study other people's sensory values and behaviours, but
243 rather work reflexively and collaboratively with participants to explore and identify
244 sensory values and behaviours (Pink, 2015). I was honest and open with participants
245 about the focus on exploring sensory and embodied experiences which allowed them
246 to directly engage and reflect on their experiences in a collaborative way.

247 Eight participants were recruited (including one allotment project volunteer). All
248 eight gave consent to be observed, and four of these consented to be interviewed. The

249 four participants who were interviewed have all been given culturally appropriate
250 pseudonyms: Solomon, from Nigeria; Fred, from the Democratic Republic of the
251 Congo (DRC); Aster, an African refugee who wishes to have no identifiable
252 information connected to them and Jenny a female volunteer from the local area.
253 Jenny had been a volunteer at the garden for over three years, and was invited to
254 take part as she brought invaluable knowledge of the allotment project to the
255 research process. This point brings me to discussion of my own role within the
256 allotment. Stoller (1997) argues researchers will often arrive at an understanding of
257 the experience by unplanned instances where they have paid attention to their own
258 embodied experiences. Understanding how our own sensory and embodied
259 experiences contribute to an understanding of the whole experience can help to
260 understand how those who we are studying are experiencing their surroundings.
261 Thus, reporting of the themes takes at times an auto-ethnographic approach where
262 self-reflection and exploration of anecdotal and personal experience is clearly
263 expressed within the writing, as a mean to understand the wider context under study.

264 Pink's (2015) approach to sensory ethnography was used as the methodological
265 framework. Fieldwork consisted of attending the allotment during the spring and
266 summer of 2017 (April – August), twice a week, where I engaged in the same daily
267 allotment activities as the participants. Pink's (2015) approach to sensory
268 ethnography sees participant observation become 'multisensory participation'
269 utilising three key elements: the serendipitous sensory learning of being there; the
270 ethnographer as a sensory apprentice and joining others in embodied experiences. I
271 discussed with the participants that I had a particular interest in their sensory and
272 embodied experiences in the allotment. The sensory and embodied are intertwined
273 and overlapping categories, but data on the two was collected in slightly differently

274 ways. It wasn't uncommon for participants to discuss the plants and their
275 experiences in the garden in reference to sensory categories. Data was obtained
276 through these informal serendipitous conversations. Further to these serendipitous
277 sensory encounters, I would also directly ask participants about their sensory
278 experiences whilst working in the allotment. This made it easier for participants to
279 reflect on their allotment tending in a way that was immediate and embodied. To
280 explore the participants' embodied experiences, I observed the way participants used
281 their bodies in the allotment. I also asked participants to pay attention to their bodies
282 as they worked. I would ask them in the moment what their body was doing.
283 Furthermore, through engaging in the same embodied activities as the participants, I
284 was able to reflect on my embodied experiences. I would also follow up observations,
285 and self-reflections during informal conversations with participants or during the
286 interviews.

287 In addition, I carried out four semi-structured individual interviews in the
288 allotment. Conducting interviews in situ was key to data collection, as it allowed for
289 immediate sensory elicitation. Carrying out interviews in the allotment acted as a
290 reference point for the participants when reflecting on their experiences, producing
291 rich data that would not be captured using conventional interview techniques (Pink,
292 2015).

293 Pink (2015) suggests there is a misconception of a clear division between data
294 collection and analysis within ethnographic research. It is difficult to separate the
295 'analysis' from the ethnographic encounters where the knowledge first emerged. An
296 ethnographic theoretical dialogue was commented throughout the data collection
297 process, where I began to draw out the potential themes and connected these with
298 theory. The theoretical dialogue resulted in collection and analysis being a cyclical

299 process whereby my interpretations would be followed up on during further
300 interactions. The analytical framework of Immersion and Crystallisation (I/C) was
301 used to organise and interpret data (Borkan, 1999). I/C involves initial crystallisation
302 of potential themes, the ‘theoretical dialogue’. Completion of field-work then sees
303 complete immersion in the raw data, where open coding was used, followed by axial
304 coding to connect or disconnect these with the initial crystallised themes and
305 produce the final themes. The final themes include: ‘presence, movement and
306 sociability’; ‘sensory and embodied nostalgia’ and ‘plants as perceiving bodies’. The
307 following section discuss these themes and their contribution to understanding *how*
308 the allotment acted therapeutically for refugees.

309

310 **3. Findings and Discussion**

311 3.1. Presence, movement and sociability

312 Participants demonstrated the allotment as a place-making activity largely
313 orientated around a place to escape stress through keeping physically active and busy
314 and a place of belonging through embodied social interaction. These embodied
315 experiences constituted in part *how* the allotment acted therapeutically.

316 ‘Sometimes people don’t want eye contact, they don’t want to talk, they want
317 to be left alone, a smile can be enough and being present in the garden shows
318 love’ (Jenny, a female volunteer)

319 Here Jenny explores her belief that simply being physically present in the allotment
320 is enough to show ‘love’. Jenny is highlighting the way that embodied social
321 interaction is meaningful, irrespective of verbal communication. Jenny also draws on
322 an emotion, ‘love’. Ahmed (2008) argues that it is important to recognise that

323 emotions are sociable; we feel with and for others and are moved by the proximity of
324 others, a point reflected in Jenny's quote. Aster, adds further reflection on this:

325 'I don't always like to talk, I can just do my watering, but it doesn't matter if
326 I'm not talking to anyone, just being here with everyone means that I am not
327 alone'

328 It appears that the allotment may tackle feelings of loneliness, and therefore improve
329 well-being, without the need for verbal interaction but through the proximity and
330 presence of others whilst engaging with their environment. Solomon adds:

331 'We just need to be doing our jobs, we don't always have to be chatting, you
332 know that's why people like it here they can just get on'

333 The group that attended the allotment was small, it was a quiet place and there were
334 times that I would also work in silence. I too experienced the embodied feeling of the
335 presence of others, reminding you that you are not alone even when you may have
336 been silent for a while:

337 Field-notes 2/08/2017: Raining, everyone huddled under a tree pulling the
338 pea pods. No one was really speaking, because we were looking down at the
339 pea pods with hoods up. Even though no one was talking I felt like there was
340 some kind of connection because we were doing the task together, it wasn't an
341 awkward silence.'

342 This extract draws attention to the significance in the presence of others to create a
343 sense of collectiveness. A simple smile or nod as you pass someone was sufficient
344 social interaction to feel a sense of collectiveness and contentment. Furthermore,
345 Solomon and Fred address that within the allotment many different languages are
346 spoken:

347 'There are all different languages here, we can't all speak the same language,
348 and not everyone can speak English that well, so like I said we don't need to be

349 talking all the time we can just be here' (Solomon)

350

351 'I am still learning English so I don't always understand everyone but it

352 doesn't matter so much because we are working' (Fred)

353 They both comment on how verbal communication is indeed of lesser importance to

354 them than embodied presence within the allotment. Additionally, Fred comments

355 that he does not always understand everyone but that it does not matter since he is

356 working. This highlights that physical movement could address what may be

357 considered awkward silences if people struggle to communicate with each other.

358 Reflecting what Doughty (2013) found when she observed the embodied therapeutic

359 nature of a walking group in the UK. She commented that walking relaxed social

360 norms around talking and allowed pockets of silence not to feel awkward. Speaking

361 limited English may have produced feelings of nervousness in social situations.

362 Movement whilst gardening appeared to allow the participants to feel less obliged to

363 talk, whilst still feeling present within the allotment. For groups such as refugee and

364 asylum seekers, social isolation and loneliness are common (The Forum, 2015).

365 Thus, the findings suggest that, through embodied presence, the allotment acted as a

366 means to alleviate feelings of loneliness and this can be regarded as an insight into

367 *how* the allotment acted therapeutically.

368 Further to the presence of bodies creating a sense of collectiveness and

369 alleviating loneliness, throughout my time attending the allotment I began to learn

370 the way that the body could convey sociability. Ingold and Lee-Vergunst (2008) in

371 their anthology on walking claim that walking is a profoundly sociable activity due to

372 the social orientation towards the world movement creates. Movement can style

373 social interaction in specific ways. Ingold and Lee-Vergunst's (2008) reflections on

374 walking can be used to explore the way the allotment gardeners would use their body

375 to communicate their current state of mind. During fieldwork, there were times
376 participants would receive particularly bad news; for example, one instance of a
377 participant's family reunion application being rejected. On this occasion, the
378 participant chose to work alone and spent most of the day working in the allotment
379 with their back to the group. Everyone respected the participant's wish to work alone
380 and not socialise.

381 Field-notes 3/06/2017: [...] she had not worked near the rest of the group
382 today and had been weeding on a plot in the corner of the allotment, when we
383 sat on the picnic bench to have a break I asked her if she was ok, she replied
384 that she 'didn't feel good today'. Although quite quiet she did normally work
385 with the group, but she didn't today.

386 Participants used their body to convey to the group their desired level of social
387 interaction. Contrastingly, if participants were feeling sociable, people would move
388 around while carrying out their jobs in the allotment and conversations would flow.
389 Through encounters such as this, I began to understand that the participants' choice
390 in movement was essential to how the allotment developed into a therapeutic
391 landscape. People had agency and control in how they decided to use their body to
392 interact with others for their own personal therapeutic needs. Movement and
393 interaction with others was indicative of their current state of mind.

394 The most common reason people gave when asked why they attended the
395 allotment was to 'keep busy' or 'something to do'. Embodied physical movement
396 focuses a sense of presence in one's own body and can be restorative in that this
397 shifts focus away from internal stress or thoughts weighing on the mind (Doughty,
398 2013). This was demonstrated when Jenny exclaimed:

399 'I just love gardening, you go to a completely other world!'

400 Here Jenny reflects on the way the physical activity can transport the mind to

401 perhaps a calmer place in that moment. Something which Thrift (2008, pp. 7) refers
402 to when he highlights the capacity for movement to shift attention from a
403 ‘consciousness centred core’ to an ‘embodied sense-experience’. This finding mirrors
404 Pitt’s (2014) use of ‘flow’ to understand how a community garden acted
405 therapeutically. Pitt (2014, pp. 87) found that the importance of physical activity was
406 most acute in allotment attendees who were unemployed and did not want to be
407 ‘stuck indoors’. Similarly, in the allotment it was extremely common for participants
408 to discuss the impact of unemployment. They would often refer to ‘working’ in the
409 allotment, evidenced in the following quotes:

410 ‘When I’m here I’m not thinking about anything else I am just working and
411 enjoying the garden and enjoying my work’ (Solomon)

412

413 ‘I don’t have to think about my problems, I am distracted because I am
414 working, you know I like to keep active’ (Fred)

415 These quotes further draw on traits of ‘emplaced flow’ where physical action absorbs
416 people to the point where nothing else seems to matter (Csikszentmihalyi, 2002).

417 In these quotes both men refer to the actual physical labour they do in the allotment,
418 and how this movement can distract them from internal problems, or allow them to
419 have moments of clarity where their sole focus is working on the task.

420 This theme has explored the way embodied presence, distinct movements and
421 embodied interaction with the environment, were part of *how* the allotment acted
422 therapeutically. The presence of others alleviated feelings of loneliness; sociability
423 needs were conveyed through the body and focusing on an embodied activity
424 distracting the mind from stress.

425

426 3.2. Sensory and embodied memory and nostalgia

427 This theme explores sensory and embodied nostalgic experiences within the
428 allotment that were underpinned by a re-territorialized relationship with place. It
429 became clear that all of the refugee participants came from agrarian backgrounds or
430 at least had experience in subsistence living:

431 Aster: 'I like the garden because back home in my compound we grew things'

432 Fred: 'my mum she make a garden and she told me "Fred come, in life you
433 make sure you have your garden because if you don't have any money you go
434 to your garden and get something to eat", it is advice my mum gave to me'

435 Tending the allotment was a means to engage in familiar activities. Previous
436 knowledge and experience were used to make a place meaningful within new
437 surroundings. There were moments of excitement and joy when participants
438 described what it felt like when they discovered a fruit from their home country here
439 in the UK. As Fred once commented:

440 'I saw the plant, the same plant was from my country, the plant was the same
441 colour [...] I said my god look at that! Here in the allotment it is most like
442 home, the corn, the potato, apples, you know we have more types of apples in
443 Africa, we have a really small one, but still I like to see an apple because it's
444 just like the things we have back home'

445 Here Fred not only expresses his excitement and joy when he discovered similar
446 produce to Africa, but also begins to draw on the differences between the UK and
447 Africa. The differences in growing practices between Africa and the UK were often
448 discussed. Solomon explained that in Nigeria:

449 'you could leave the farm for 6 months and when you return everything that

450 fell off the tree naturally will have grown up again, you can eat it or sell it.’

451 He explained that, in his opinion, this is not the way it works in the UK because of
452 the chemicals used to grow crops. The allotment was not entirely organic, however,
453 when participants were critical of the use of ‘chemicals’ to grow produce in the UK
454 they were generally referring to agribusiness and the products available in
455 supermarkets. When telling such stories participants appeared nostalgic for their
456 former place. In another conversation, Aster and Solomon discussed ‘basil’, and that
457 the smell was the most amazing thing about it. Solomon explained:

458 ‘my mother would cook with basil all the time, it grew around where I lived
459 and you know that makes it smell better, it smells stronger because it is just
460 naturally growing there aren’t any chemicals or anything’

461 Although no chemicals were used to grow the basil in the allotment, the seeds were
462 bought from a supermarket. Solomon compares this to the way basil would freely
463 grow around his home in Africa. Most of the participants that attended the allotment
464 were African and portrayed collective memory and nostalgia for Africa and the
465 African way of ‘doing things’. Blunt’s (2003) theorising of ‘productive nostalgia’ is
466 particularly useful here, to understand some of the ways participants were using
467 nostalgia in their place-making practices within the allotment. Blunt (2003, pp. 722)
468 used the term to represent a longing for home that was ‘embodied and enacted in
469 practice rather than solely in narrative or imagination’. Participants represented
470 their nostalgia for Africa in an embodied way, through the physical act of gardening
471 to the nostalgia for certain smells. Their engagement with this sensory nostalgia
472 appeared at times to be a longing for the African way of ‘doing things’, which may
473 have evoked homesickness, thus not entirely a therapeutic experience in that

474 moment (drawing attention to the therapeutic landscapes relational nature, even for
475 the same person a place can be at times therapeutic and at times not). However,
476 Blunt (2003) argued that the nostalgic desire for home and its enactment was
477 centred around the future not only the past; an argument mirrored in the following
478 quote from an allotment gardener:

479 ‘The UK is where I live now but having a place where I can feel a bit of Africa
480 is really important’

481 The importance of re-territorializing the people-place relationship underpins this.
482 The allotment gardener is clear about being in the UK now, however, they are
483 expressing the importance of their connection to Africa. Furthermore, by expressing
484 the desire to ‘feel a bit of Africa’ the participant incorporates the embodied
485 experience of this nostalgia rather than solely the imaginary.

486 Stevenson (2014, pp. 342) argued the multisensory nature of emplaced
487 memory associates senses such as smells with ‘establishing connections among the
488 past, present, far and near’. Seikikides et al. (2008) further argued that nostalgia can
489 create a healthy sense of self-continuity and can be a mean to use positive
490 perceptions about the past to foster a sense of continuity and meaning in the present.
491 These arguments contribute to an understanding of how through the sensory
492 nostalgia, the allotment was acting therapeutically.

493 The use of chemicals to grow food in the UK was a source of contempt for all
494 the participants and was frequently discussed. Oyangen (2009) discussed the
495 gustatory identity of migrants and explained that putting something into our body is
496 potentially an anxiety provoking activity. Cultural food systems help to relieve this
497 anxiety. A food system regulates how and what we eat. The allotment gave the

498 participants a way to give eating food in a new place a familiar stamp. Growing their
499 own food from seed to fruit was a way to ‘know’ what they are putting in their mouth,
500 thus potentially relieving gustatory anxiety. The following quote comes from an
501 informal conversation I had with an allotment gardener:

502 ‘I like to come to the allotment and at least grow a couple of things I can eat,
503 you know in Africa we don’t shop like you do, we grow it all, that’s what we do,
504 at least with the allotment I can grow some things for myself and know where
505 it came from’

506 Through this place-making activity participants took charge of their gastronomical
507 displacement (Oyanger, 2009). The food norms and values that were left behind
508 stayed with them through symbolic reminders and transplantation of traditional
509 growing practices.

510 The participants had created a space that was experienced therapeutically
511 through this relief of gustatory anxiety and through maintaining continuity between
512 past and present selves. All the refugee participants came from a background in
513 subsistence living therefore the act of allotment tending was a means to maintain a
514 continuity between past and present selves. Nostalgia for former ways of ‘doing
515 things’ and sensory nostalgia of smells, textures and tastes, coupled with self-
516 continuity, was another way the allotment was experienced therapeutically.

517 3.3. Plants as perceiving bodies

518 This final theme discusses the frequent use of metaphors and anthropomorphism
519 of the plants. This acted as a reminder for participants to nurture themselves, and
520 the anthropomorphism of the plants acted as a vehicle to tell stories of their

521 displacement that could be understood as cathartic.

522 During one of the hottest days of the summer, Fred said:

523 'you know the plants need water to survive just as much as we do'.

524 Here Fred explains the way that the basic needs of humans and plants have
525 similarities. I also found myself humanising the plants. For example:

526 Field-notes 4/07/2017: I had been watering but forgot the plants in the
527 greenhouse. Solomon said to leave it as they would get watered the following
528 day. I felt like the plants would be gasping for water and I felt an
529 overwhelming need to water them.

530 This humanisation of the plants highlights why gardening is often said to be
531 therapeutic, because of peoples' urge to nurture (Milligan et al., 2004; Camps-Calvet
532 et al., 2015). Jenny brought up the concept of nurturing in her interview and claimed
533 it to be one of the most important parts of the garden for the refugees. She
534 commented:

535 'to make something grow gives a sense of pride in oneself [...] when in the
536 garden they can blossom themselves'

537 Nurturing a plant from seed to bearing fruit can act as a metaphor for nurturing
538 ones-self. This metaphor for nurturing the self is something consistently reported
539 with the use of gardening as occupational therapy (Poulsen et al., 2014; Scott et al.,
540 2014). Milligan et al. (2004) in their study of a garden as a therapeutic landscape for
541 older people also noted the metaphor of nurturing. They commented on how the
542 nurturing of plants and themselves was extended to nurturing of others. The care
543 that everyone took for each other was something I also witnessed. Solomon would

544 tell people to sit and have a rest if they looked tired. We would all make hot drinks
545 for each other and the garden was just a generally caring and nurturing environment.
546 The following quote from Aster highlights this:

547 'you know we are here to look after the plants, but we also all need help. We
548 need help in many parts of our lives if we want to thrive here, we can look
549 after the plants but we also look after each other.'

550 Here Aster reflects on the way that care of the plants extends to care of each other
551 within the allotment.

552 In addition to the allotment acting as a metaphor for self-care, I would argue
553 that the anthropomorphism of the plants was used by the participants to tell stories
554 of their displacement and sense of place. For example, once the corn plants were
555 established out in the soil some grew quicker than others and blocked the sun from
556 the smaller plants. Solomon decided to uproot these plants and move them to
557 another bed where they would receive more sunlight. However, when we returned
558 the following week they were dying. Solomon said you could tell they were unhappy
559 because they had twisted their centre inward. He commented that the plants were
560 saying:

561 'you all hate me, why did you put me here? You know it is like you take a boy
562 from his family and put him with all these little boys he won't like it, these
563 plants are three weeks younger than him, he is looking back at his family and
564 saying "why?" You know it's funny we have been through similar things to
565 this, it is quite similar'

566 Here Solomon uses an experience with the plants as a reference to the traumatic
567 experiences people who attend the allotment have faced. The allotment was a safe
568 space where people shared stories of their past with each other. For example, Aster
569 discussed an event in their country where a bomb had gone off in a cinema and Fred
570 discussed the impact mining precious metals had on communities in the DRC.
571 Having a safe space to share stories and using the crops to assist in telling such
572 stories, I argue, contributed to the participants experience of the allotment as
573 therapeutic. Within therapeutic settings the meaning of catharsis describes the
574 power that narrating a prior trauma can have in assisting victim's recovery (Kearney,
575 2007). Thus, the participants sharing of stories within the allotment may have acted
576 as a process of cathartic release.

577 'Give him a chance' was a common phrase used by Solomon and another male
578 attendee when referring to plants that maybe weren't doing so well or hadn't
579 sprouted much. They would still put the plant out into the allotment from the green
580 house or move the plant to somewhere it could receive more sunlight. They would
581 give the plant a chance rather than discarding it and use the phrase '*give him a*
582 *chance to be a man*'. One day another male attendee added to this:

583 'you know we need a chance too, we give them a chance, because we're given a
584 chance.'

585 Here the participant poignantly reflects on how their interaction with the natural
586 environment can reflect how they feel they are treated here in the UK as refugees. If
587 they are given the chance, they may too, stand tall. O'Neill (2018) explored the lived
588 experiences of migrant women in Teesside. One woman commented on her
589 appreciation of the way the fountains in the park went up and down as being

590 symbolic for the way that the women had been pushed down by the system but that
591 they get back up. O'Neill's (2018) findings and the findings presented in this article
592 demonstrate where solace can be found in symbolic features of an allotment/park.

593 The participants anthropomorphism of the plants acted as a metaphor to
594 remind them to nurture themselves and care for others whilst in the allotment.
595 Furthermore, the participants humanised the plants to the point of observing them
596 as having perceiving bodies. For example, when Solomon described the way a plant,
597 that had literally twisted its stem, and 'turned away from us'. This level of
598 humanisation, was what allowed the participants to use the plants as a vehicle to tell
599 their own stories of displacement and re-emplacement in a manner that may be seen
600 as cathartic. This contributes to an understanding of *how* the allotment acted
601 therapeutically for this group.

602 **4. Concluding remarks**

603 Exploring and understanding spaces of restoration and healing for refugees is
604 important to assist in improving the well-being and experiences of refugees within
605 new countries. In response to comments of an under-theorisation of *how* places act
606 therapeutically, I argue that these sensory, embodied and re-territorialized ways of
607 place-making were *how* the allotment acted therapeutically. The allotment alleviated
608 feelings of loneliness through the embodied experience of 'presence' rather than
609 verbal communication. Interaction of the body with the natural environment had the
610 ability to transport the mind to clearer and perhaps calmer places. The
611 anthropomorphism of plants acted as a metaphor to remember to nurture oneself
612 and allowed participants to share stories of displacement and re-emplacement in a
613 cathartic manor. Through participants place-making they had sought out a place

614 where they could be nostalgic for former ways of life through collective memory, and
615 maintain a continuity between past and present selves. This was largely triggered by
616 sensuous experiences. Here the importance of the re-territorialized relationship with
617 place is an important factor in how the allotment was therapeutic. Relationships with
618 former places played a defining role in the present and the construction of the
619 allotment as a therapeutic space.

620 This article has worked towards connecting, often unconnected areas of
621 contemporary scholarship, by extending work on refugee sensory and embodied
622 place-making to an allotment setting, with the theoretical framing of therapeutic
623 landscapes. Furthermore, the study has explored *how* the allotment was therapeutic
624 for a group of people who have often faced prolonged trauma in their life and whose
625 relationship towards place is a particularly important one. Participants sought out a
626 space to reconnect with place and create a place that was therapeutic not only for
627 themselves but also for those who they shared the space with. Although some of the
628 therapeutic qualities identified may be applied to other groups, some are distinct to
629 this population. This highlights the relational nature of therapeutic spaces. The
630 therapeutic strength of sensory nostalgia for this group is directly related to the
631 context in which they are now in the allotment: a journey of displacement and re-
632 emplacement. They used humanisation of the plants as a vehicle to tell stories of this
633 journey. Participants place-making and resulting development of a therapeutic space
634 was characterised by a re-territorialized relationship with place. Their allotment
635 tending fostered a clear connection to new places whilst incorporated attachments to
636 places left behind. This supports Wang et al.'s (2018) call for a need to explore more
637 about the relations between sensory feelings and healing within the specific socio-
638 cultural contexts.

639 Work that explores how an allotment space is therapeutic for this population
640 may be drawn on to understand how to seek out such places and/or create
641 therapeutic spaces for refugee populations.

642

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650

651 **5. References**

652 Ahmed, S. (2008). 'Sociable happiness.' *Emotion, Space and Society*, 1(1):10–13.

653 Bell, S. L., Foley, R., Houghton, F., Maddrell, A., and Williams, A. (2018). 'From
654 therapeutic landscapes to healthy spaces, places and practices: A scoping
655 review.' *Social Science and Medicine*, 196:123-130.

656 Bell, S. L., Phoenix, C., Lovell, R. and Wheeler, W. B. (2015). 'Seeking everyday well-
657 being: The coast as a therapeutic landscape.' *Social Science and Medicine*,
658 142:56-67.

659 Bishop, R. and Purcell, E. (2013). 'The value of an allotment group for refugees.'
660 *British Journal of Occupational Therapy*, 76(6):264–269.

661 Blunt, A. (2003). 'Collective memory and productive nostalgia: Anglo-Indian
662 homemaking at McCluskieganj.' *Environment and Planning D: Society and*

- 663 *Space*, 21:717-738
- 664 Blunt, A. (2007). 'Cultural geographies of migration: mobility, transnationality and
665 diaspora.' *Progress in Human Geography* 31(5):684-694.
- 666 Borkan, J. (1999) 'Immersion/Crystallization' In Crabtree, B. F. and Miller W. L.
667 (Eds.) *Doing Qualitative Research*. (2nd ed.). Thousand Oaks CA: SAGE, pp.
668 179-194.
- 669 Brun, C. (2001). 'Reterritorilizing the Relationship between People and Place in
670 Refugee Studies.' *Geografiska Annaler, Series B: Human Geography*,
671 83(1):15-25.
- 672 Butterfield, A. and Martin, D. (2016). 'Affective sanctuaries: understanding Maggie's
673 as therapeutic landscapes.' *Landscape Research*, 41(6):695-706.
- 674 Casey, E. (2001). 'Between Geography and Philosophy: What Does It Mean to Be in
675 the Place-World?' *Annals of the Association of American Geographers*,
676 91(4):683-693.
- 677 Conradson, D. (2005). 'Landscape care and the relational self: therapeutic
678 encounters in rural England.' *Health and Place*, 11(4):337-348.
- 679 Corlett, J., Clegg, M., Carl, K., and Grivetti, L. (2002). 'Mineral content of culinary
680 and medicinal plants cultivated by Hmong refugees living in Sacramento,
681 California.' *International Journal of Food Sciences and Nutrition* 53(2):117-
682 128.
- 683 Cresswell, T. (2004). *Place: A Short Introduction*. London: Wiley-Blackwell.

- 684 Csikszentmihalyi, M. (2002). *Flow*. London: Rider.
- 685 Davies, R. (2008). 'Working with refugees and asylum seekers: Challenging
686 occupational apartheid.' In Pollard, N., Sakellariou, D. and Kronenberg, F.
687 (Eds.) *A Political Practice of Occupational Therapy*. Oxford: Elsevier, pp.
688 183-190.
- 689 Doughty, K. (2013). 'Walking together: The embodied and mobile production of a
690 therapeutic landscape.' *Health & Place* 24:140-146.
- 691 Dudley, S. (2010). 'Feeling at home: Producing and consuming things in Karenni
692 refugee camps on the Thai-Burma border.' *Population, Space and Place*
693 17(6):742-755.
- 694 Duff, C. (2011). 'Networks, resources and agencies: on the character and production
695 of enabling places.' *Health and Place*, 17(1):149-156.
- 696 Foley, R. (2011). 'Performing health in place: the holy well as a therapeutic landscape
697 assemblage.' *Health and Place*, 17(2):470-479.
- 698 Gesler, W. M. (1992). 'Therapeutic Landscapes: Medical issues in light of the new
699 cultural geography.' *Social Science & Medicine*, 34(7): 735-46.
- 700 Gesler, W. M. (1993). 'Therapeutic landscapes: theory and a case study of
701 Epidauros, Greece.' *Environment and Planning D: Society and Space*,
702 11:171-89.
- 703 Gesler, W. M. (1996). 'Lourdes: healing in a place of pilgrimage.' *Health and Place*,
704 2(2):95- 105.
- 705 Giddens, A. (1991). *Modernity and Self-Identity*. Cambridge: Polity Press.

706 Gorman, R. (2017). 'Smelling therapeutic landscapes: Embodied encounters within
707 spaces of care farming' *Health and Place*, 17:22-28.

708 Gupta, A. and Ferguson, J. (1997). *Culture, Power, Place: Explorations in Critical*
709 *Anthropology*. Durham, NC: Duke University Press.

710 Harris, N., Minniss, F. and Somerset, S. (2014). 'Refugees Connecting with a New
711 Country through Community Food Gardening.' *International Journal of*
712 *Environmental Research and Public Health*, 11(9):9202-9216.

713 Hawkins, J., Mercer, J., Thirlaway, K. and Clayton, D. (2013). 'Doing' Gardening and
714 'Being' at the Allotment Site: Exploring the Benefits of Allotment Gardening
715 for Stress Reduction and Healthy Aging.' *Ecopsychology*, 5(2):110-125.

716 Ingold, T. and Lee-Vergunst, J. (2008). *Ways of Walking: Ethnography and*
717 *Practice on foot*. New York: Routledge.

718 Kearney, R. (2013). 'Narrating Pain: The Power of Catharsis.' *Paragraph*, 30(1):51-
719 66.

720 Kibreab, G. (1999). 'Revisiting the Debate on People, Place, Identity and
721 Displacement.' *Journal of Refugee Studies*, 12(4):384-410

722 Lambert-Ward, M. (2014). 'Old Roots: Place-Making and Hybrid Landscapes of
723 Refugee Urban Farmers.' PhD dissertation, Department of Environment and
724 Society, Utah State University.

725 MacKinzie, A. (2016). 'Beyond Food: Community Garden as Places of Connection
726 and Empowerment.' Retrieved 29th December 2018
727 (<https://www.pps.org/article/beyond-food-community-gardens-as-places->

- 728 of-connection-and-empowerment)
- 729 Malkki, L. (1992). 'National Geographic: The Rooting of Peoples and the
730 Territorialization of National Identity Among Scholars and Refugees.'
731 *Cultural Anthropology*, 7(1):24-44.
- 732 Massey, D. (1994). *Space, Place and Gender*. Cambridge: Polity Press.
- 733 Milligan, C., Gatrell, T. and Bingley, A. (2004). 'Cultivating health: therapeutic
734 landscapes and older people in northern England.' *Social Science and*
735 *Medicine*, 58(9):1781 – 1793.
- 736 Milligan, C. and Bingley, A. (2007). 'Restorative places or scary spaces? The impact
737 of woodland on the mental well-being of young adults.' *Health and Place*
738 13(4):799-811.
- 739 O'Neill, M. (2018). 'Walking, well-being and community: racialized mothers building
740 cultural citizenship using participatory arts and participatory action
741 research.' *Ethical and Racial Studies*, 41(1):73-97.
- 742 Oyangen, K. (2009). 'The Gastrodynamics of Displacement: Place-Making and
743 Gustatory Identity in the Immigrants' Midwest.' *Journal of Interdisciplinary*
744 *History*, 39(3):323-348.
- 745 Peña, D. (2006). 'Putting knowledge in its place: Epistemologies of place-making in a
746 time of globalization.' *Plenary Address prepared for the Place Matters*
747 *Conference, Diversity Research Institute, University of Washington Urban*
748 *Horticultural Centre*. Retrieved August 2, 2017. (Available at:
749 <http://www.acequiainstitute.org/researchreports.html>)

- 750 Pink, S. (2015). *Doing Sensory Ethnography*. 2nd ed. London: Sage.
- 751 Pitt, H. (2014). 'Therapeutic experiences of community gardens: putting flow in its
752 place.' *Health and Place*, 27:84-91.
- 753 Poulsen, M., Hulland, K., Gulas, C., Pham, H., Dalglish, S., Wilkinson, R. and Winch,
754 P. (2014). 'Growing an Urban Oasis: A Qualitative Study of the Perceived
755 Benefits of Community Gardening in Baltimore, Maryland.' *Culture,*
756 *Agriculture, Food and Environment*, 36(2):69-82.
- 757 Rose, E. (2012). 'Encountering place: a psychoanalytic approach for understanding
758 how therapeutic landscapes benefit health and wellbeing.' *Health and Place*,
759 18(6):1381-1387.
- 760 Sampson, R. and Gifford, S. (2010). 'Place-making, settlement and well-being: The
761 therapeutic landscapes of recently arrived youth with refugee backgrounds.'
762 *Health & Place*, 16(1):116-131.
- 763 Scott, T., Masser, B., and Pachana, N. (2014). 'Exploring the health and wellbeing
764 benefits of gardening for older adults.' *Ageing and Society*, 35(10):2176-2200.
- 765 Sekikides, C., Wildschut, T., Arndt, J. and Routledge, C. (2008). 'Nostalgia Past
766 Present and Future.' *Current Directions in Psychological Science*, 17(5):304-
767 307.
- 768 Söderback, I., Söderström, M. and Schäländer, E. (2004). 'Horticultural therapy: the
769 "healing garden" and gardening in rehabilitation measures at Danderyd
770 hospital rehabilitation clinic, Sweden.' *Paediatric Rehabilitation*, 7(4):245-
771 260.

- 772 Soga, M., Cox, D., Yamaura, Y., Gaston, K., Kurisu, K. and Hanaki, K. (2017). 'Health
773 Benefits of Urban Allotment Gardening: Improved Physical and Psychological
774 Well-Being and Social Integration.' *International Journal of Environmental
775 Research and Public Health*, 14(1):71.
- 776 Stevenson, A. (2014). 'We Came Here to Remember: Using Participatory Sensory
777 Ethnography to Explore Memory as Emplaced Embodied Practice.'
778 *Qualitative Research in Psychology*, 11(4): 335-349.
- 779 Stoller, P. (1997). *Sensuous Scholarship (Contemporary Ethnography)*.
780 Philadelphia: University of Pennsylvania Press.
- 781 The Forum. (2015). 'Loneliness is the biggest challenge facing refugees and migrants
782 in London.' Retrieved March 12, 2019 (Available at:
783 [https://www.campaigntoendloneliness.org/blog/loneliness-refugees-
784 migrants/](https://www.campaigntoendloneliness.org/blog/loneliness-refugees-migrants/))
- 785 Thrift, N. (2008). *Non-representational Theory: Space, Politics, Affect*. Oxon:
786 Routledge.
- 787 Turrini, G., Purgato, M., Ballette, F., Nosè, M., Ostuzzi, G. and Barbu, C. (2017).
788 'Common mental disorders in asylum seekers and refugees: umbrella review
789 of prevalence and intervention studies' *International Journal of Mental
790 Health*, 11(51):1-14
- 791 Turton, D. (2004). 'The Meaning of Place in a World of Movement: Lessons from
792 Long-term Field Research in Southern Ethiopia.' *Journal of Refugee Studies*,
793 18(3):258-280.
- 794 Verra, M., Angst, F., Beck, T., Lehmann, S., Brioschi, R., Schneiter, R. and
795 Aeschlimann, A. (2012). 'Horticultural therapy for patients with chronic

796 musculoskeletal pain: results of a pilot study.' *Alternative Therapies in health*
797 *and medicine*, 18(2):44-50.

798 Wang, K., Cui Q., Xu, H. (2018). 'Desert as therapeutic space: Cultural interpretation
799 of embodied experience in sand therapy in Xinjiang Chine.' *Health and Place*,
800 53:173-181.

801 Ward-Thompson, E., Aspinall, P. and Bell, S. (2010). *Innovative Approaches to*
802 *Researching Landscape and Health*. London and New York: Routledge.

803 Whatley, E., Fortune, T. and Williams, A. (2015). 'Enabling occupational
804 participation and social inclusion for people recovering from mental ill-health
805 through community gardening.' *Australian Occupational Therapy Journal*,
806 62(6):428-437.

807 Wood, C. J., Pretty, J. and Griffin, M. (2016). 'A case-control study of the health and
808 well-being benefits of allotment gardening.' *Journal of Public Health*,
809 38(3):336-344.

810
811
812