

1 **A peaceful place in the city – A qualitative study of restorative components**
2 **of the cemetery**

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19 **1. Abstract**

20 Cemeteries in Scandinavia are culturally and historically valuable places. In addition, they
21 represent well-maintained green spaces in the urban fabric. The combination of nature,
22 culture, and history makes cemeteries interesting to explore as restorative environments. To
23 our knowledge, no published studies have yet focused on users' perception of the cemetery as
24 a restorative environment. This study therefore set out to initiate research on the topic. A
25 qualitative explorative approach was applied in which we interviewed 59 visitors to a
26 cemetery in Oslo about their use and experiences of the cemetery. This explorative approach
27 was used because we did not want to impose any thoughts about restoration on the users. It
28 turned out that visitors' experiences and descriptions of the cemetery corresponded well with
29 the definition of a restorative environment. We therefore used the restorative components as
30 described in the attention restoration theory: *fascination*, *being away*, *extent*, and

31 *compatibility* as the basis for analyzing the interviews. The findings support the notion that
32 the combination of nature, culture, and history, as well as respect for the deceased and others
33 visiting graves, contributes to the description of the cemetery as a restorative environment,
34 and makes the cemetery different from other green spaces in the city in that these qualities
35 can foster relaxation, reflection, and contemplation.

36

37 **2. Introduction**

38 Urban green spaces are important to city dwellers' quality of life. A growing body of
39 literature suggests that the health benefits of green spaces are due to their potential to reduce
40 stress and support recovery from mental fatigue (WHO Regional Office for Europe, 2016).
41 An environment that supports the process of mental recovery can be defined as a restorative
42 environment (Hartig, 2004). The restorative potential of different natural environments is
43 explored in the literature, including forests and natural areas (Sonntag-Ostrom et al., 2014),
44 parks (Nordh, Hartig, Hagerhall, & Fry, 2009), gardens (Tenngart Ivarsson & Hagerhall,
45 2008; Van Den Berg & Custers, 2011), a zoo (Pals, Steg, Siero, & van der Zee, 2009), and
46 even elements of nature indoors (Raanaas, Evensen, Rich, Sjøstrøm, & Patil, 2011).
47 However, in the restorative environment literature, limited attention is given to the context of
48 the natural environment, or the specifics of particular environments, which is something that
49 should be explored further in relation to different types of green spaces. To our knowledge,
50 no studies have yet focused on the users' perceptions of a green cemetery as a restorative
51 environment.

52 It may seem surprising that cemeteries, places associated with death, should be
53 regarded as restorative environments or places that can evoke positive affect. However,
54 cemeteries in Scandinavia are well-maintained green lungs in the urban fabric, they are
55 thereby one, though very specific, type of green space. In addition to being green spaces,

56 cemeteries are shown to be perceived as culturally and historically valuable places
57 (Woodthorpe, 2011). Others have found that cultural and historical urban settings (Hidalgo,
58 Berto, Paz Galindo, & Getrevi, 2006), museums (Arvidson & Tell, 1997; Kaplan, Bardwell &
59 Slaker, 1993; Packer & Bond, 2010), and monasteries (Eriksson & Wiklund-Gustin, 2014;
60 Ouellette, Kaplan, & Kaplan, 2005) can be restorative environments. The built environments
61 mentioned above are to some extent related to the cemetery. The presence of graves,
62 monuments, and consecrated buildings makes cemeteries historical and cultural places.
63 Furthermore, cemeteries are open air museums, sometimes even tourist attractions, and, like
64 monasteries, it is not unlikely that cemeteries can contribute to spirituality, and thereby
65 provide a restorative environment (Ouellette et al., 2005). As discussed above, the
66 combination of nature, culture, and history makes cemeteries particularly interesting to study
67 as restorative environments.

68

69 **2.1 Restorative environments**

70 In order to study the restorative qualities of cemeteries as green spaces, this study draws on
71 two psychological theories that explain the restorative potential of natural environments. The
72 stress recovery theory (SRT) (Ulrich et al., 1991) states that non-threatening natural
73 environments can initiate a restorative process through positive affective responses. It is
74 argued that people have an innate positive response to greenery that blocks or reduces
75 negative affect. SRT is sometimes used as an explanation for scenic beauty or preference for
76 an environment. The attention restoration theory (ART) (Kaplan & Kaplan, 1989; Kaplan,
77 1995) also argues that the presence of natural features has significance for restoration, but
78 takes a cognitive stance. According to ART, mental fatigue occurs as a result of staying
79 focused on a task, thereby taxing the capacity for directed attention. The theory is based on
80 the premise that environments that encompass features that do not put demands on directed

81 attention, but rather trigger undirected or effortless attention, can initiate the restoration
82 process. This enables the restoration of the capacity for directed attention. Any type of
83 environment can trigger effortless attention, but natural environments more often encompass
84 components that support mental restoration than do built environments (Berto, 2005; Berman,
85 Jonides, & Kaplan, 2008; Kaplan, 1995).

86 According to ART, an environment supports restoration through the four restorative
87 components: *fascination*, *being away*, *extent*, and *compatibility* (Kaplan & Kaplan, 1989;
88 Kaplan, 1995). *Fascination* happens when the environment catches one's interest
89 spontaneously and without effort, stimulated by features or patterns in the landscape. This
90 psychological mode of involuntary attention is often referred to as soft fascination, which
91 gives people an opportunity to restore their attention capacity and, hence, rest from other
92 demanding thoughts. *Being away* refers to an experience of psychological distance from
93 everyday worries. A change of physical and psychological setting can divert people's
94 attention away from everyday routines and demands, thereby further facilitating the
95 restorative process. *Extent* refers to coherence/order in the environment, as well as sufficient
96 scope for exploration. *Compatibility* is the ability of the environment to meet people's current
97 psychological needs or achieve the purpose of visiting it, making it a place in which one can
98 do things one likes, and an environment that supports visitors' desired activities.

99 Several instruments have been developed to measure the restorative quality of
100 an environment (see, for example, Han, 2003; Hartig, Korpela, Evans, & Garling, 1997;
101 Korpela, Ylen, Tyrvaainen & Silvennoinen, 2008; Lehto, 2012; Pasini, Berto, Brondino, Hall,
102 & Ortner, 2014; Purcell, Peron, & Berto, 2001; Van den Berg, Jorgensen, & Wilson, 2014).
103 These instruments mainly build on the ART framework and are composed of a number of
104 statements that describe the different restorative components, such as "This place is a refuge
105 from unwanted distractions" (Being away) (Purcell et al., 2001). As pointed out by Korpela

106 and colleagues (2008), these instruments have limitations, and a qualitative approach is
107 suggested as a supplement to identify the determinants of restoration.

108 The SRT and ART theories focus on different environmental features and
109 different mechanisms explaining the restorative process. The present study is mainly guided
110 by ART, because ART enables a broader exploration of the impact of the physical properties
111 of the cemetery, in that it focuses on both natural and built environments, and goes beyond
112 the mere focus on natural features outlined in SRT. While SRT focuses solely on the presence
113 of natural environments or elements as an initiator of the restorative process, ART is more
114 concerned with the people-environment interaction and hence allows for a more contextual
115 analysis of the restoration process that is relevant to the experience in a cemetery. This is also
116 mirrored in the aforementioned instruments measuring restorative quality.

117 The restoration process involves different stages, from clearing the head to attention
118 restoration and reflective mode (Kaplan & Kaplan, 1989). Studies show that exposure to
119 natural environments can better support everyday problem-solving and reflection than built
120 environments can (e. g., Herzog, Black, Fountaine, & Knotts, 1997; Mayer, Frantz,
121 Bruehlman-Senecal, & Dolliver, 2008). The potential of the cemetery as a place to rest, as
122 well as a place to reflect on life issues, hence seems relevant to explore from a cognitive
123 perspective using the ART framework. However, in the discussion, positive affective
124 appraisal as an initiator of the restorative process, as described in SRT, is discussed as
125 another potential explanation of people's experiences in the cemetery.

126

127 **2.2. Design and use of cemeteries**

128 Many cemeteries in Scandinavia contain both nature elements, such as trees and wildlife, and
129 cultural-historical elements, such as gravestones and sculptures. Cemeteries in Scandinavia
130 originated in around the year AD 1000, and were established for the burial of Christians.

131 Over the years, cemeteries have been used for a number of different “official” activities,
132 ranging from business and judicial proceedings, as was the case during the Middle Ages
133 (Brendalsmo, 2014), to the more recreational purposes we see at some cemeteries today
134 (Evensen, Nordh & Skaar, 2017; Swensen, Nordh & Brendalsmo, 2015). The design of
135 cemeteries as well as their use has changed with changing views of death and bereavement
136 (Jacobsen, 2013). In a pilot study from Gamlebyen gravlund (The Old Town Cemetery) in
137 Oslo, we noted that many people visit the cemetery to tend graves, plant flowers, light
138 candles, and to remember the deceased (Swensen et al., 2015). Some people visited the
139 cemetery when grieving and during life crises, others with happy memories. Some people
140 came to the cemetery without having a grave to visit, but because they saw it as a beautiful
141 place that they, for different reasons, felt attached to. Parallels can be drawn to a Finnish
142 study on imagined restorative perceptions of a favorite place, in which place attachment and
143 positive autobiographical memory were shown to predict restoration (Ratcliffe & Korpela,
144 2016).

145 In Norway, there are rules prohibiting some activities in cemeteries. These rules are
146 posted near the entrance to most cemeteries. It is not permitted to drive a vehicle (without
147 permission), run, cycle or sunbathe in cemeteries. Dogs are welcome, but must be kept on a
148 lead. Hence, the rules signal activities that promote a calm atmosphere. The cemeteries’
149 design, as well as the above-mentioned rules, help to inform people about what behavior is
150 expected.

151 The greenness of cemeteries is a quality that clearly makes them attractive for
152 purposes other than visiting a grave. A variety of activities carried out at urban cemeteries
153 was presented by Evensen and colleagues (2017), who registered people’s everyday use of
154 two Norwegian cemeteries. In Scandinavia, cemeteries have a lot of vegetation compared to
155 cemeteries in, for example, the Mediterranean countries. Most Scandinavian cemeteries have

156 lawns and a network of paths, and the gravestones are laid out in a grid-like pattern. This is
157 also the case in the cemetery we will present in this paper. Many cemeteries are enclosed by
158 either hedges, stone walls, or fences. Hedges are commonly used to create walls or “rooms”
159 within the cemeteries. Compared to parks, cemeteries may have a higher number of flowering
160 plants (Andersson, Barthel, & Ahrné, 2007; Kowarik, Buchholz, von der Lippe, & Seitz,
161 2016) and are often better maintained. The standard of maintenance at a cemetery is
162 important to visitors. An unmaintained grave signals lack of care and lack of meaning
163 (Berglund, 1994). According to Berglund (1994), who conducted a study of people’s
164 perception of cemeteries in the 1990s, a cemetery is a place for both the deceased and the
165 living, and its design should support people who are in grief. Cemetery design has become a
166 niche within landscape architecture, but there is only limited research literature on cemetery
167 design and how it is experienced by visitors (Sommer, 2003; Søndergaard Holm, 2015).
168 There is also a lack of empirical studies that explore which specific types of cemetery
169 landscape design might support mental restoration and reflection among visitors.

170 The rationale for studying the cemetery as a restorative environment can be summed
171 up as follows. First, cemeteries are park-like environments, with natural features that,
172 according to theory, can promote restoration (Kaplan & Kaplan, 1989, Kaplan, 1995; Ulrich
173 et al., 1991). There is also a large body of empirical literature showing that experiences of
174 nature can promote restoration (for reviews, see Hartig et al., 2014; WHO Regional Office
175 for Europe, 2016). Second, cemeteries contain elements of history and culture, elements that,
176 according to others, can support a restorative experience (Arvidson & Tell, 1997; Eriksson &
177 Wiklund-Gustin, 2014; Hidalgo et al., 2006; Kaplan et al., 1993; Packer & Bond, 2010;
178 Ouellette et al., 2005). Third, as seen in previous studies, some people use cemeteries for
179 recreational purposes, such as resting on a bench (Evensen et al., 2017, Swensen et al., 2015).
180 Lastly, people may have personal memories related to cemeteries. As others have found,

181 place attachment, but also positive autobiographical memory, can predict restoration
182 (Ratcliffe & Korpela, 2016).

183

184 **2.3. Aim of the study**

185 The aim of this study was to explore whether descriptions of restorative components
186 spontaneously emerged in interviews about visitors' use and experiences of a cemetery in
187 Oslo. In the analysis, we noticed that people's experiences and descriptions of the cemetery
188 corresponded well with the definition of a restorative environment. We therefore used
189 restorative components as described in ART as the basis for the analyses of interviews. Based
190 on this qualitative approach, which is rarely used in studies on restorative environments, the
191 study set out to initiate research on the cemetery as a restorative setting, thereby broadening
192 our understanding of what can constitute a restorative environment.

193

194 **3. Methods**

195 **3.1. The site**

196 Gamlebyen gravlund is located in the eastern part of Oslo, 15 minutes' walk from the city
197 center; see Figure 1. The cemetery covers an area of around five hectares, and contains
198 8 500 graves, 200 of which are of historical value according to the municipality of Oslo (Oslo
199 municipality, 2015). The cemetery has roots dating back to the Middle Ages and is located in
200 an area of Oslo of high cultural heritage value. Towards the southeast, the cemetery borders
201 on a residential area with around 6 000 inhabitants.

202 Like other Scandinavian cemeteries, Gamlebyen gravlund is park-like in that it has
203 many hedges, bushes, flowers, lawns, and trees. The site contains a number of different
204 species of trees. Some are architecturally and visually important elements, such as the avenue
205 of old chestnut trees in the eastern section, and a row of relatively newly planted silver

206 birches in the middle of the cemetery (see Figure 2 for a map and Figures 4–6 for
207 photographs). The cemetery is surrounded by a fence and has three main entrances, one to the
208 north and two to the south (see the black triangles in Figure 2). Parts of the cemetery are also
209 surrounded by hedges. Some of the bushes have been cut back in recent years to make the site
210 more open, and to increase perceived safety. Some parts of the cemetery are relatively open
211 and have fewer graves, especially towards the west and north. In these areas, some dog
212 owners have begun to meet with their dogs. Other popular activities at the cemetery include
213 walking – both taking a stroll and just passing through – cycling, jogging, exploring, and
214 resting on a bench. All graves maintained by the municipality were in 2014 planted with red
215 *Begoniaceae*, while the privately maintained graves had a more individual appearance. The
216 cemetery is situated on a small hill, with grass-covered slopes towards the west and east.
217 Because of the topography, there are several spots offering fine views of the cemetery. The
218 site is divided into different zones separated by gravel or asphalt paths. The paths are laid out
219 in a traditional grid pattern. The oldest part of the cemetery is the area towards the southwest.
220 It is also the site of the memorial to one of the founding fathers of the Norwegian
221 Constitution, Christian Magnus Falsen. There is a memorial in the southwest, and a Muslim
222 section was established in the eastern part of the cemetery in 1972; see Figure 2. There is a
223 chapel at the cemetery, which is currently rented out to a Coptic congregation (Oslo
224 municipality, 2015).

225

226 **3.2. Semi-structured interviews**

227 Data were collected through on-site, semi-structured interviews in the summer of 2014. Fifty-
228 nine adult visitors to the cemetery took part in the study, 48% of them men. Most of the
229 interviewees were on their way home or to town, or were visiting a grave at the cemetery. For

230 an overview of interviewees' reasons for being at the cemetery when they were interviewed,
231 see Figure 3.

232 Visitors to the cemetery were cautiously approached. They were informed that the
233 study was part of a research project and they were asked whether they had time for a short
234 interview. People who showed signs of grief were not approached. All three authors, as well
235 as a fourth project member, contributed to the data collection, although all the interviews
236 were conducted individually. The length of the interviews varied: 18 interviews were shorter
237 than 10 minutes, 29 lasted between 10 and 20 minutes, and 12 interviews lasted for more than
238 20 minutes. The shortest ones were conducted while standing, while visitors who had time for
239 a longer talk were asked to sit on one of the benches. The visitors were asked for consent to
240 record the interview. Most of the interviewees accepted recording. However, twelve asked us
241 not to record; in these cases, notes were taken immediately after the interviews and these
242 notes were added to the transcript in the analysis phase. The notes were coded, similarly to
243 the transcript, but none of the notes were chosen as quotes in the results section.

244 Because we were interested in visitors' own descriptions of the cemetery, we
245 formulated questions about the experience of the cemetery in general, rather than specifically
246 about restoration. In this way, we ensured that we did not impose any thoughts on the
247 interviewees as regards restoration. The questions we asked were: Why are you here today?
248 How would you describe this place? How would you describe the atmosphere? Do you regard
249 this place as a park, and, if not, why not? The interviews ended with a conversation about
250 who the visitors to the cemetery were, and what activities they personally thought would be
251 acceptable at the cemetery. In the longer interviews, we gave the interviewees an opportunity
252 for deeper reflection about the place, the interviewee's relationship to the cemetery, and any
253 other topics that arose.

254

255 **3.3. Analyses**

256 The analyses of the data were based on thematic analysis as described by Braun and Clarke
257 (2006). We started by transcribing and condensing the recorded interviews. The condensation
258 involved deleting sections of the transcripts that were not relevant to the research questions,
259 in order to end up with shorter material that was easier to gain an overview of. These sections
260 could, for example, be anecdotes about other places, other people, or questions that the
261 interviewee asked the researcher. In this phase, the transcript was reduced from 195 pages of
262 text to 74 pages. To arrive at an overall impression of all the material, the transcripts were
263 read and re-read several times by the first author. While reading the entire transcript,
264 sentences or sections of text describing experiences of the cemetery or its atmosphere were
265 highlighted as codes in a bottom-up approach. The codes were then grouped into overarching
266 themes. Each theme was given its own color, after which the codes were marked with
267 different colors depending on what theme they belonged to. The choice of themes was
268 discussed by the first and second author. The grouping of codes resulted in a thematic map of
269 initial themes and sub-themes. During the coding process, we found repeated patterns that
270 fitted well with the restorative components in ART (fascination, being away, compatibility,
271 and extent). This led us to proceed with a top-down, theoretically driven thematic analysis
272 (Braun & Clarke, 2006; Hayes, 1997). Thus, we used the restorative components as described
273 in ART (Kaplan & Kaplan, 1989; Kaplan, 1995) and items from three rating scales: the
274 Perceived Restorative Scale (Hartig et al., 1997), the Percieved Restorative Scale -11 (Pasini
275 et al., 2014), and the Restorative Scale (Purcell et al., 2001) as the basis for our further
276 analysis. In accordance with top-down qualitative analysis, a qualitative codebook was
277 developed (Creswell, 2009) to assist the analysis. The codebook included the definitions of
278 the restorative components and the items from the rating scales. The initial themes and their
279 respective codes were re-analyzed to see whether they fitted with the restorative components

280 of ART. In the results section, findings from the top-down process guided by ART are
281 presented. A few longer segments from the transcript are presented, showing the discussion
282 between the researcher and the interviewee, combined with several shorter quotes that
283 particularly point to the component that it was aimed to describe. The themes were given
284 names. We chose a descriptive name and included the name of the restorative components in
285 the headings of the themes to demonstrate the clear link to the theory and to give the reader a
286 direct association with the experience we wished to convey. In the discussion section, we
287 elaborate on our choice of themes and what other themes emerged in the bottom-up analysis.
288 It is important to note that the choice of themes reflects the entire transcript. This does not
289 mean that all interviewees talked about all themes. Of the 59 interviewees we talked to, 53
290 (89%) mentioned one or more restorative components, which is why this was found to be
291 highly relevant to the analysis.

292

293 **4. Results**

294 Clear parallels were found between people's experiences of the cemetery and descriptions of
295 a restorative environment, as presented by the Kaplans (Kaplan & Kaplan, 1989; Kaplan,
296 1995). All the restorative components, individually or combined, contributed to the
297 interviewees' visits to the cemetery. We present the result of the top-down analysis below.

298

299 **4.1. Nature and culture at the cemetery as sources of fascination**

300 In the literature, fascination is described as the process whereby the environment catches
301 one's interest spontaneously and holds the attention effortlessly (Kaplan & Kaplan, 1989;
302 Kaplan, 1995). The transcript contains several examples of the cemetery being described as
303 catching the interviewee's interest spontaneously, and awakening his or her curiosity, at the
304 same time as it contributes to reflection and reminiscence.

305

306 Some visitors referred to natural objects at the cemetery as contributing to the fascination of
307 the site. The visitors specifically commented on the trees. Below is a segment from an
308 interview with a man who worked near the cemetery. As can be seen in the interview, he
309 pointed to both nature and culture at the cemetery as a source of fascination:

310

311 *The researcher (R): Why are you here today?*

312 *I'm often here...I work nearby. I think the cemetery is a lovely, quiet place to be....It's nice
313 and quiet here, calm. I like the colors, the trees.*

314 *R: Yes, that's how it feels. Yes, it's calm like you say. And beautiful?*

315 *Yes, cemeteries in Norway are beautiful places. Yes, I think so. M-m, for, you're like, born
316 and grow up with respect for the deceased, that's how it is. Yes, it's very nice. It's, it's lovely
317 to relax. A bit noisy here, it's like between the railway and such but, no, it's nice.*

318 *R: Yes, do you think a lot about the sounds in the surroundings.*

319 *No, I don't, it's just big city sounds. But my parents' grave is at Vestre Gravlund [another
320 cemetery] and my children are often there with me. To begin with, there are many interesting
321 trees there that you don't see everywhere, it was designed like that, also it's in a fine place and
322 there are many interesting people buried there, so there's a lot of history....Here they have
323 many Vietnamese graves.*

324 *R: Yes, I've seen them.*

325 *Yes. So it's a cemetery where, if you go and look at the gravestones, you see completely different
326 symbolic practices in a way compared to what we're used to, so it's, it's educational.*

327 (G7, man in his 60s)

328

329 The visitors to the cemetery did not just talk about visual aspects, however. Bird sounds and
330 seasonal variations were also mentioned, and they can represent the experience of fascination.

331 A young woman living near the cemetery described how she appreciated the place. She
332 described it as beautiful, peaceful, and well-maintained. A place that gave her “peace of
333 mind”, to use her own words. When the interviewer asked what she meant by beautiful, she
334 put it as follows:

335

336 *For me, it's about all the greenery and that there are some natural colors. And I think big*
337 *trees are really beautiful. And that there's a slight breeze and natural rustling, gentle sounds*
338 *in the heart of the city, in the middle of the noise of the city. (G85, woman in her 30s)*

339

340 Many visitors mentioned their appreciation of history and culture at the site. They described
341 how they walked in the cemetery and read the inscriptions on the graves or watched the
342 different ways in which people decorated their graves. Below is an example of this, a quote
343 from a woman describing her fascination for old graves:

344

345 *As I pass by, I read the inscriptions on the gravestones, the dates, and some of them are*
346 *fascinatingly old. It's almost like reading stories. (G13, woman in her 50s)*

347

348 Traces of history made them reflect. This man nicely describes how the history and stories
349 behind the graves fascinate him, hold his interest, and make him reflect on life and death:

350

351 *Yes, it's fascinating. And then you see a name you'd forgotten. Yes, there's a lot of history*
352 *here. Then you see a little child who has died, and you think about that as well. So you reflect*
353 *a lot on life and death. (G86, man in his 50s)*

354

355 **4.2. Being away – the cemetery as a place to withdraw to**

356 In the literature, being away refers to an experience that provides a break from people's day-
357 to-day routine, a refuge from unwanted distractions and a place to get away from things that
358 demand attention (Kaplan & Kaplan, 1989; Kaplan, 1995). For several interviewees, a visit
359 to the cemetery seems to serve as a refuge from hectic city life. Many interviewees talked
360 about their appreciation of the serene and quiet environment, and its natural sounds, which
361 were different from those otherwise heard in the city. This is illustrated in this interview with
362 a woman:

363

364 *R: But I wonder why you're here today?*

365 *I usually walk through here when I'm on my way to group therapy.*

366 *R: Yes, I see.*

367 *And it's a peaceful calm place, when I come here, so it's lovely to be here.*

368 *R: Yes.*

369 *Quiet.*

370 *R: So if you were to describe this place, it would be like we've already said. Lovely, quiet.*

371 *Peaceful.*

372 *R: Peaceful. Beautiful?*

373 *Yes, that too. It's terribly beautiful here.*

374 *R: ...What makes it beautiful?*

375 *It's tidy and looks nice here. There's no littering. Everything is well cared for.*

376 *R: Is it the season, do you think it's extra nice now, does it change?*

377 *I've lost my grandparents, even if they're not buried here. But it's like, very all right to walk in*
378 *a cemetery because there's, like, time to reflect. Quiet and calm and set apart, like, in relation*
379 *to the rest of the town.*

380 *(G5 woman in her 40s)*

381

382 Below we provide an example of how the experience of being away in such a place
383 contributes to relaxation, reflection, and contemplation.

384

385 *...it's just a little – what should I call it – a little breathing space on the way home or on the*
386 *way to town, or... Now, I'm on my way to town. And I sat down and took a break for five*
387 *minutes on the way from... (...) I think cemeteries are pretty unique places in the city. (...) It*
388 *can be a nice place to think and let your thoughts roam free. Yes, it's good for you*
389 *psychologically. Yes. Pleasant on the eye and good for your head. (G88, middle-aged man)*

390

391 Some of the interviewees walked through the cemetery instead of taking the pedestrian
392 walkway outside the cemetery. For some, crossing through the cemetery took a bit longer, but
393 the feeling of getting away at the cemetery was worth that extra walk, as illustrated by this
394 quote from a woman also cited earlier in the paper:

395

396 *When I'm walking to and from the tram etc., I often walk through the cemetery instead of*
397 *walking along the road. Just to get that good feeling of being in a place like this, it's like*
398 *being in a park, isn't it?*

399 *(G13, woman in her 50s)*

400

401 **4.3. Extent – scope, order, and the sense of care**

402 In the literature, extent is described as order and an environment where there is sufficiently
403 “much going on” to occupy one’s mind (Kaplan & Kaplan, 1989; Kaplan, 1995). Both
404 Purcell and colleagues (2001) and Pasini and colleagues (2014) divide extent into coherence
405 (e.g., a clear order, things fit together naturally) and scope (e.g., the place goes on forever,
406 few boundaries that limit movement). The cemetery offers an enclosed space in the city,
407 facilitating the experience of scope. Below is an interview with a woman who walked her
408 daughter’s dog at the cemetery and described the feeling of extent:

409 *I think it's very idyllic here.*

410 *R: Idyllic?*

411 *Yes it is.*

412 *R: Ok.*

413 *And generally peaceful. ... So, it's beautiful, pure and simple. I live in the country, so I*
414 *appreciate, I appreciate small oases like this one. Even if it's a cemetery you don't basically*
415 *think about it. You don't.*

416 *I: No... So there's something positive about the place, is that what you're trying to say?*

417 *Yes, yes, that's right.*

418 *(G4, woman in her 60s)*

419 Many of the interviewees commented on the absence of litter, the neatly trimmed vegetation
420 and the good management provided by the municipality. They talked about the variety of
421 plants, the order and sense of care. They appreciated the standard of maintenance at the
422 cemetery and compared it to the lack of maintenance in other city parks. An example of order
423 and scope at the cemetery is given by this old lady, who has visited the cemetery since
424 childhood:

425

426 *Yes. It's really lovely down here at Gamlebyen, you know. It's pretty and tidy, easy to find*
427 *your way around. (G14, old woman)*

428

429 **4.4. Compatibility - a place to relax, reflect, and contemplate**

430 In the literature, compatibility is used to describe a place that fits with your personal
431 inclinations, a place that does not put demands on you, and a place in which you feel a sense
432 of belonging (Kaplan & Kaplan, 1989; Kaplan, 1995, Herzog, Hayes, Applin, & Weatherly
433 2011). As shown in the quotes from the transcript, several interviewees experienced the
434 cemetery as a peaceful and quiet place that they appreciated or said that they needed in their
435 everyday lives. Below is an example of this, here from a young woman who lived nearby and
436 walked her dog at the cemetery a couple of times a day:

437

438 *If you are, yes, in need of relaxation and restoration, then this is the place to go to. Yes actually,*
439 *or need to be alone. Then I can walk down here. (G20, woman in her late 20s)*

440

441 The cemetery was often described as a place in which it is possible to be alone. A man in his
442 fifties even mentioned that he had his own bench for thinking. Some interviewees talked about
443 the absence of people at the cemetery, and that there was always enough space to withdraw to.
444 Throughout the transcript, we can find examples of how interviewees sat down on the benches
445 to take a break, which is a description of relaxation, while others described how the cemetery,
446 in contrast to a park, makes people think and reflect, i.e., provides experiences of restoration.
447 For example, a woman visiting a grave together with her husband described how they usually
448 sat down on one of the benches to rest and reflect after they had tended to the grave of her
449 mother-in-law. Another woman said she used the cemetery as a place to gather her thoughts
450 before participating in a group therapy program. When we asked the interviewees to compare
451 the experience at the cemetery to other green spaces in the city, such as parks, several of them
452 described the restorative qualities of the cemetery as unique and very valuable. The example
453 below illustrates this.

454

455 *It's not the same as a park, because there aren't lots of children running around playing, you*
456 *can just take things easy and sit on a bench (G6, woman in her 50s).*

457

458 **5. Discussion**

459 This case study of an urban cemetery in Oslo showed that a cemetery can support experiences
460 of the four restorative components as described in ART: *fascination, being away, extent, and*
461 *compatibility*. Below, we will discuss these findings and elaborate on the specifics of the
462 cemetery compared to other green spaces in the city.

463

464 **5.1. Potential for restoration at the cemetery**

465 In line with other studies on restorative environments (e.g., Nordh et al., 2009), the visitors to
466 the cemetery experienced nature and specific natural elements as a source of fascination. In
467 addition to natural elements, there are cultural and historical elements at the cemetery that,
468 according to the interviewees, can awaken curiosity, as well as triggering reflection. This
469 makes the cemetery different compared to other green spaces in the city and may increase its
470 restorative potential. The interviewees acknowledged the calm atmosphere of the cemetery
471 and expressed appreciation for bird sounds. Natural sounds are one aspect that others have
472 identified as an important source of fascination (Ratcliffe, Gatersleben, & Sowden, 2013).
473 The experience of the cemetery as a quiet place was interesting, since the level of traffic
474 noise at the cemetery was very high most of the time. The visual experience of nature within
475 the noisy city seemed to intensify the positive experience of natural sounds. Interestingly, the
476 calm atmosphere seemed to affect how the visitors perceived the sound level, experiencing it
477 as quieter than the actual decibel level.

478 The cemetery was described as a place where it was possible to withdraw and relax
479 (cf. being away). Interviewees referred to it as a refuge from the rest of the city. Some
480 described how they would sit down there for a short while on their way home from work, and
481 how the feeling of being away was strengthened by the cemetery being different from the rest
482 of the city. Traces of culture and history made visitors to the cemetery reflect about past
483 times. It seemed to give them an opportunity to mentally enter another time. This illustrates
484 how the cemetery can contribute to creating psychological distance to people's everyday
485 lives. This could be further explored as a temporal aspect of being away, as opposed to being
486 away spatially. It could also support the idea that positive memories, about past times, could
487 predict the potential for restoration (Ratcliffe & Korpela, 2016).

488 Many of the interviewees talked about the variety of plants, the order, and experiences
489 of scope (cf. extent). Some of the visitors to the cemetery used the word *oasis* when referring

490 to the cemetery. Like Gamlebyen gravlund, most cemeteries are enclosed environments. They
491 have hedges, fences or stone walls separating them from their surroundings. The interviewees
492 also acknowledged the variety and possibilities for exploration the cemetery offered. As the
493 results show, it is easy to find one's way around the cemetery. Perhaps the grid-like pattern of
494 graves and paths provided a framework of order that contributed to the experience of extent.
495 Further, most visitors appreciated the standard of maintenance at the cemetery, finding it to
496 be more well-kept than other green spaces in the city.

497 Throughout the material, there are examples of how the cemetery is used for
498 relaxation, reflection, and contemplation. Some visitors intentionally seek out the cemetery
499 for these purposes. Some even describe the good fit between the need for restoration and
500 what the place offers (cf. compatibility), as described, for example, by those who actively
501 choose to spend five minutes in the cemetery to relax or reflect on their way home from
502 work. A few even went as far as to say that, if they wanted to relax, they would not go to a
503 park but to a cemetery instead. For them, the park was too noisy, with too many people and
504 activities compared to the cemetery, where it was possible to find refuge and be alone.

505 It is interesting in itself that, for some visitors, the cemetery fits their restorative needs
506 so well. One might expect people to have more negative or melancholic associations with the
507 cemetery as a place for grief, not least because others have found that the presence of
508 cemeteries in a neighborhood can have a negative effect on apartment prices (Czembrowski
509 and Kronenberg, 2016). However, our interviewees seemed to describe positive affect or
510 memories associated with the place and for different reasons felt attached to it.

511 In the transcript, there are examples of interviewees who talked about memories
512 related to the cemetery environment, or activities they had engaged in at the cemetery. Some
513 talked about the importance of the experiences of nature and culture as their reasons for

514 visiting the cemetery. Place attachment and positive autobiographical memory as predictors
515 of the restorative experience are confirmed by others (Ratcliffe & Korpela, 2016).

516 Kaplan and Kaplan (1989) describe the reflective mode as the last stage in the
517 restorative process. Reflection has only been explored to a relatively limited extent in the
518 literature on restoration (Mayer et al., 2008), but in our study we found that the visitors
519 tended to use the cemetery to reflect on life issues in general. There seems to be something in
520 the atmosphere of the cemetery that encourages reflection. The results indicate that the
521 presence of graves is what encourages respectful behavior, reflection and contemplation. It
522 could also be the case that the cemetery fosters spirituality, a factor that others have found to
523 affect the potential for restoration (Ouellette et al., 2005). Many visitors talked about the
524 peaceful atmosphere and linked it to people's respect for the deceased and others visiting
525 graves. The atmosphere, but also the posted rules, may have an effect on behavior. However,
526 most visitors were not familiar with the rules posted at the cemetery, while a few appreciated
527 the rules because they defined a kind of framework for what they could do at the cemetery. In
528 addition to the written rules, the interviewees also talked about "unwritten rules". These
529 unwritten rules were based on common sense as regards what was proper behavior at a
530 cemetery. It seems probable that some visitors to the cemetery will not experience
531 compatibility because of both the written and unwritten rules.

532

533 **5.2. Methodological reflections and ideas for future research**

534

535 **5.2.1. Overlapping components.** The visitors to the cemetery spontaneously mentioned
536 several restorative components they had experienced, either in the same sentence or
537 throughout the interview. The overlapping of components made the analysis somewhat

538 challenging, especially when we were searching for quotes representing single components.
539 This supports the idea that restoration is a total experience.

540 Overlaps were found between being away and extent. The interviewees talked about
541 the cemetery as a green environment that is different from the city and how it made them
542 experience a feeling of getting away through entering an oasis. Similar overlaps can be found
543 between extent and fascination. The interviewees were fascinated by the beauty at the site.
544 When we asked what they meant by beauty, they usually referred to flowers, trees, graves but
545 also the level of maintenance and the general order.

546

547 **5.2.2. Other themes.** We applied a theoretically driven thematic analysis (Braun & Clarke,
548 2006), since we found that ART clearly corresponded to the experiences described by the
549 visitors to the cemetery. However, other themes were also found in the material. There was
550 one theme in particular that was discussed, *the beauty of nature*. Various descriptions of the
551 experience of the beauty of nature were found in the transcript. It sometimes proved a
552 challenge to decide whether these experiences were related to any of the restorative
553 components or whether they could be a sign of affective appraisals in line with SRT (Ulrich
554 et al., 1991). Some people described the cemetery as nice because of the experiences of
555 nature it offered, without explaining further why or how that was the case. We chose to group
556 such statements as nature experiences, because we could not link them to any of the aspects
557 of the restorative process. As long as their descriptions did not involve interaction between
558 people and the environment, which is a criterion for the restorative experience, we chose not
559 to categorize them as a restorative component.

560 Another theme that was discussed was *preference*. Several of the interviewees said
561 that they liked the place. They used words such as idyllic, cozy and nice; this could be linked
562 to SRT (Ulrich et al., 1991), in that the cemetery fostered positive affective appraisal and

563 feelings of liking. However, when digging deeper into why they liked the cemetery, beyond
564 mere preference, we often found links to the ART components. For example, some people
565 liked the place because they could be alone there when they needed to be (cf. compatibility).
566 Others liked it because it was a green lung in the city that gave them a mental, but also a
567 physical, break on their way home from work (cf. being away and compatibility). Others
568 liked it simply because it was beautiful and interesting to keep track of all the flowers and
569 seasonal changes (cf. fascination and extent). Individually or combined, the restorative
570 components seem to have contributed to a wish to visit the cemetery. In those situations when
571 the interviewee did not give any explanation for *why* they liked the cemetery, we chose to
572 group the statements as preference. This was because environmental preference *per se* is not
573 necessarily the same as a restorative environment. There might be other reasons why the
574 interviewees like the place. Preference is often correlated with restoration in studies based on
575 rating scales (Han, 2010; Herzog et al., 2003; Purcell et al., 2001; Tenngart & Hagerhall,
576 2008). However, these studies build on perceived restoration measures rather than actual
577 measures, and, as pointed out by others (Han, 2010; Herzog et al., 2003), the relationship
578 between actual restoration and preference needs further attention. As Hartig and Staats (2006)
579 show, environmental preference can vary with psychological state, such as a need for
580 restoration. Similarly, van den Berg and colleagues (2003) show that the need for stress
581 recovery, measured as affective restoration, can mediate preference for the environment. In
582 our study, we do not know the interviewees' need for restoration; however, the transcript
583 contains several descriptions of why the visitors like the cemetery that are related to ART.
584 One can argue that our qualitative study focused on actual experiences of restoration, but
585 viewed in retrospect.

586

587 **5.2.3. Limitations of a qualitative approach.**

588 We applied a qualitative approach in which we used the items from the three instruments
589 (Hartig et al., 1997; Pasini et al., 2014; Purcell et al., 2001) to identify whether restorative
590 components emerged in on-site interviews with visitors to the cemetery. This qualitative
591 approach could be seen as a strength in a research field that is dominated by quantitative
592 research. Instead of asking visitors to score the cemetery on a pre-defined rating scale, we
593 gave them the opportunity to describe their experiences without imposing any thoughts about
594 restoration on them. Since we aimed to initiate research on the cemetery as a restorative
595 environment, we applied this qualitative explorative approach. The next step would be to
596 apply one of the instruments measuring perceived restorative quality among visitors at the
597 cemetery (for an overview of instruments, see Letho, 2012).

598 This study is based on interviews with visitors whom we cautiously approached at the
599 cemetery. This gave us a convenience sample. We talked to 59 people at the cemetery. Some
600 of the interviews were very brief, however, and did not give us the depth that qualitative
601 studies aim for. The relatively high number of interviews nevertheless give us a valuable
602 breadth. Another approach could have been to contact people beforehand to arrange a later
603 appointment with the researcher.

604 Because this study focuses on just one cemetery, located in Norway, these findings
605 may not be generalizable to other cemeteries or cemeteries in other countries. Because this is
606 a qualitative study, it is not intended to be generalizable, but rather to contribute to theoretical
607 knowledge about what can constitute a restorative environment. It is likely that people from
608 different cultures use and experience cemeteries differently. In future, it would be interesting
609 to compare cemeteries across countries and cultures.

610 It could be that our interviewees had a more positive view of, or relationship to, the
611 cemetery than, for example, non-users. In the analyses, we did not distinguish between
612 descriptions by different types of visitors, as this would have required more data. In future, it

613 would be interesting, for example, to compare differences between age groups in how people
614 may use the cemetery as a restorative place across the lifespan (Scopelliti and Giuliani,
615 2004).

616

617 **6. Conclusions**

618 In this study, we found that the cemetery in Gamlebyen Oslo was perceived as a restorative
619 environment by its visitors. The restorative components – *fascination, being away, extent,*
620 *and compatibility* – were found in the descriptions of the cemetery given in the interviews.
621 The phrasing differed from person to person, but the links to ART were clear among most
622 visitors to the cemetery. The visitors' descriptions implied that it was the combination of
623 nature, culture, and history, as well as respect for the deceased and others visiting graves, that
624 made the cemetery different from other green spaces in the city. This made it a place that
625 supported restoration, and provided them with a place for relaxation, reflection, and
626 contemplation in their everyday environment.

7. References

1. Andersson, E., Barthel, S., & Ahrné, K. (2007). Measuring social–ecological dynamics behind the generation of ecosystem services. *Ecological Applications*, 17(5), 1267-1278. doi:10.1890/06-1116.1
2. Arvidson, M., & Tell, M. (1997). Museibesökarens motivation och museimiljöns betydelse. *Miljöpsykologiska monografier*, 14, 1-28.
3. Berglund, I. (1994). *Kyrkogårdens meditativa rum*. Borås: Verbum Förlag.
4. Berman, M. G., Jonides, J., & Kaplan, S. (2008). The cognitive benefits of interacting with nature. *Psychological Science*, 19(12), 1207-1212. doi:10.1111/j.1467-9280.2008.02225.x
5. Berto, R. (2005). Exposure to restorative environments helps restore attentional capacity. *Journal of Environmental Psychology*, 25(3), 249-260. doi.org/10.1016/j.jenvp.2005.07.001
6. Brendalsmo, J. (2014). Gildeskål kirkegård. In M. Stige & Ø. Ekroll (Eds.), *Gildeskål gamle kirke. Marmorkirka ved Nordvegen* (pp. 75-96). Trondheim: Fagbokforlaget Vigmostad & Bjørke AS.
7. Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
8. Creswell, J. W. (2009). *Research design: qualitative, quantitative, and mixed methods approaches*. Los Angeles: SAGE.
9. Czembrowski, P., & Kronenberg, J. (2016). Hedonic pricing and different urban green space types and sizes: Insights into the discussion on valuing ecosystem services. *Landscape and Urban Planning*, 146, 11-19. doi:10.1016/j.landurbplan.2015.10.005
10. Eriksson, N. T., & Wiklund-Gustin, L. (2014). Blessed Alienation: The Christian Monastery as a Caring and Restorative Environment. *Qualitative Health Research*, 24(2), 172-182. doi:10.1177/1049732313519708
11. Evensen, K. H., Nordh, H., & Skaar, M. (2017). Everyday use of urban cemeteries: A Norwegian case study. *Landscape and Urban Planning*, 159, 76-84. doi.org/10.1016/j.landurbplan.2016.09.019
12. Han, K.-T. (2003). A reliable and valid self-rating measure of the restorative quality of natural environments. *Landscape and Urban Planning*, 64(4), 209-233. doi:10.1016/S0169-2046(02)00241-4
13. Han, K.-T. (2010). An Exploration of Relationships Among the Responses to Natural Scenes: Scenic Beauty, Preference, and Restoration. *Environment and Behavior*, 42(2), 243-270. doi:10.1177/0013916509333875
14. Hartig, T. (2004). Restorative Environments. *Encyclopedia of Applied Psychology* (pp. 273-279). New York: Elsevier.
15. Hartig, T., Korpela, K., Evans, G. W., & Garling, T. (1997). A measure of restorative quality in environments. *Scandinavian Housing & Planning Research*, 14(4), 175-194. doi:10.1080/02815739708730435
16. Hartig, T., Mitchell, R., de Vries, S., & Frumkin, H. (2014). Nature and Health. *Annual Review of Public Health*, 35(1), 207-228. doi:doi:10.1146/annurev-publhealth-032013-182443
17. Hartig, T., & Staats, H. (2006). The need for psychological restoration as a determinant of environmental preferences. *Journal of Environmental Psychology*, 26(3), 215-226.
18. Hayes, N. (1997) Theory-led thematic analysis: Social identification in small companies. In Hayes N. (Edt.) *Doing qualitative analysis in psychology*. (s. 93-114). Sussex: Psychology Press.
19. Harvey, T. (2006). Sacred spaces, common places: the cemetery in the contemporary American city. *Geographical Review*, 96(2), 295-312. doi:10.1111/j.1931-0846.2006.tb00054.x
20. Herzog, T. R., Black, A. M., Fountaine, K. A., & Knotts, D. J. (1997). Reflection and attentional recovery as distinctive benefits of restorative environments. *Journal of Environmental Psychology*, 17(2), 165-171. doi:10.1006/jevpp.1997.0051

21. Herzog, T. R., Colleen, Maguire, P., & Nebel, M. B. (2003). Assessing the restorative qualities of environments. *Journal of Environmental Psychology*, 23(2), 159-171. doi.org/10.1016/S0272-4944(02)00113-5
22. Herzog, T. R., Hayes, L. J., Applin, R. C., & Weatherly, A. M. (2011). Compatibility: An Experimental Demonstration. *Environment and Behavior*, 43(1), 90-105. doi:10.1177/0013916509351211
23. Hidalgo, M. C., Berto, R., Paz Galindo, M., & Getrevi, A. (2006). Identifying attractive and unattractive urban places: categories, restorativeness and aesthetic attributes. *Medio Ambiente y Comportamiento Humano*, 7(2), 115-133.
24. Jacobsen, M. H. (2013). *Deconstructing death: changing cultures of death, dying, bereavement and care in the Nordic countries*. Odense: Heraldisk Selskab.
25. Kaplan, R., & Kaplan, S. (1989). *The experience of nature: A psychological perspective*. New York: Cambridge University Press.
26. Kaplan, S. (1995). The restorative benefits of nature: Toward an integrative framework. *Journal of Environmental Psychology*, 15(3), 169-183. doi:10.1016/0272-4944(95)90001-2
27. Kaplan, S., Bardwell, L. V., & Slaker, D. B. (1993). The Museum as a Restorative Environment. *Environment and Behavior*. 25(6), 725-742. doi:10.1177/0013916593256004
28. Korpela, K. M., Ylen, M., Tyrvaäinen, L., & Silvennoinen, H. (2008). Determinants of restorative experiences in everyday favorite places. *Health & Place*, 14(4), 636-652. doi:10.1016/j.healthplace.2007.10.008
29. Kowarik, I., Buchholz, S., von der Lippe, M., & Seitz, B. (2016). Biodiversity functions of urban cemeteries: Evidence from one of the largest Jewish cemeteries in Europe. *Urban Forestry & Urban Greening*, 19, 68-78. doi: http://doi.org/10.1016/j.ufug.2016.06.023
30. Lehto, X. Y. (2012). Assessing the Perceived Restorative Qualities of Vacation Destinations. *Journal of Travel Research*. 52(3), 325–339. doi:10.1177/0047287512461567
31. Mayer, F. S., Frantz, C. M., Bruehlman-Senecal, E., & Dolliver, K. (2008). Why is nature beneficial? The role of connectedness to nature. *Environment and Behavior*, 41(5), 607-643. doi:10.1177/0013916508319745
32. Nordh, H., Hartig, T., Hagerhall, C. M., & Fry, G. (2009). Components of small urban parks that predict the possibility for restoration. *Urban Forestry & Urban Greening* (8), 225-235. doi.org/10.1016/j.ufug.2009.06.003
33. Oslo municipality. (2015.03.03). Gamlebyen gravlund. Retrieved from <https://www.oslo.kommune.no/helse-og-omsorg/begravelser-og-gravferd/gravlunder-og-kirkegarder/gamle-aker-kirkegard/gamlebyen-gravlund/>
34. Ouellette, P., Kaplan, R., & Kaplan, S. (2005). The monastery as a restorative environment. *Journal of Environmental Psychology*, 25(2), 175-188. doi.org/10.1016/j.jenvp.2005.06.001
35. Packer, J., Bond, N. (2010) Museums as Restorative Environments. *Curator the Museum Journal*, 53(4), 421–436. doi:10.1111/j.2151-6952.2010.00044.x
36. Pals, R., Steg, L., Siero, F. W., & van der Zee, K. I. (2009). Development of the PRCQ: A measure of perceived restorative characteristics of zoo attractions. *Journal of Environmental Psychology*, 29(4), 441-449. doi.org/10.1016/j.jenvp.2009.08.005
37. Pasini, M., Berto, R., Brondino, M., Hall, R., & Ortner, C. (2014). How to measure the restorative quality of environments: the PRS-11. *Procedia - Social and Behavioral Sciences*, 159, 293-297.
38. Purcell, T., Peron, E., & Berto, R. (2001). Why do preferences differ between scene types? *Environment and Behavior*, 33(1), 93-106. doi: 10.1177/00139160121972882
39. Raanaas, R. K., Evensen, K. H., Rich, D., Sjøstrøm, G., & Patil, G. (2011). Benefits of indoor plants on attention capacity in an office setting. *Journal of Environmental Psychology*, 31(1), 99-106. doi.org/10.1016/j.jenvp.2010.11.005

40. Ratcliffe, E., Gatersleben, B., & Sowden, P. T. (2013). Bird sounds and their contributions to perceived attention restoration and stress recovery. *Journal of Environmental Psychology, 36*(0), 221-228. doi.org/10.1016/j.jenvp.2013.08.004
41. Ratcliffe, E., & Korpela, K. M. (2016). Memory and place attachment as predictors of imagined restorative perceptions of favourite places. *Journal of Environmental Psychology, 48*, 120-130. doi:http://dx.doi.org/10.1016/j.jenvp.2016.09.005
42. Scopelliti, M., & Giuliani, M. V. (2004). Choosing restorative environments across the lifespan: A matter of place experience. *Journal of Environmental Psychology, 24*(4), 423-438. doi.org/10.1016/j.jenvp.2004.11.002
43. Sommer, A.-L. (2003). *De dødes haver. Den moderne storbykirkegård*: Odense: Syddansk Universitetsforlag.
44. Sonntag-Ostrom, E., Nordin, M., Lundell, Y., Dolling, A., Wiklund, U., Karlsson, M., Carlberg, B., & Järholm, L.S. (2014). Restorative effects of visits to urban and forest environments in patients with exhaustion disorder. *Urban Forestry & Urban Greening, 13*(2), 344-354. doi.org/10.1016/j.ufug.2013.12.007
45. Søndergaard Holm, R. (2015). *Gravarealet som landskapsarkitektur. Variasjon, virkemidler, muligheter*. (PhD thesis), Department of Landscape Architecture and Spatial Planning, The Norwegian University of Life Sciences, Aas.
46. Swensen, G., Nordh, H., & Brendalmo, J. (2015). A Green Space between Life and Death – a case study of activities in Gamlebyen Cemetery in Oslo, Norway. *Norwegian Journal of Geography, accepted for publication*. doi.org/10.1080/00291951.2015.1102169
47. Tenngart Ivarsson, C., & Hagerhall, C. M. (2008). The perceived restorativeness of gardens - Assessing the restorativeness of a mixed built and natural scene type. *Urban Forestry & Urban Greening, 7*(2), 107-118. doi.org/10.1016/j.ufug.2008.01.001
48. Ulrich, R. S., Simons, R. F., Losito, B. D., Fiorito, E., Miles, M. A., & Zelson, M. (1991). Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology, 11*(3), 201-230. doi.org/10.1016/S0272-4944(05)80184-7
49. Van Den Berg, A. E., & Custers, M. H. (2011). Gardening promotes neuroendocrine and affective restoration from stress. *Journal of Health Psychology, 16*(1), 3-11. doi:10.1177/1359105310365577
50. Van den Berg, A. E., Jorgensen, A., & Wilson, E. R. (2014). Evaluating restoration in urban green spaces: Does setting type make a difference? *Landscape and Urban Planning, 127*, 173-181. doi.org/10.1016/j.landurbplan.2014.04.012
51. van den Berg, A. E., Koole, S. L., & van der Wulp, N. Y. (2003). Environmental preference and restoration: (How) are they related? *Journal of Environmental Psychology, 23*(2), 135-146. doi.org/10.1016/S0272-4944(02)00111-1
52. Woodthorpe, K. (2011). Sustaining the contemporary cemetery: Implementing policy alongside conflicting perspectives and purpose. *Mortality, 16*(3), 259-276. doi.org/10.1080/13576275.2011.586125
53. WHO Regional Office for Europe. (2016). *Urban green spaces and health. A review of evidence*. Retrieved from Copenhagen.

List of Figures

Figure 1. Gamlebyen gravlund in Oslo, centrally located, 15 minutes' walk from Oslo central station.

Figure 2. A map of the cemetery.

Figure 3. A description of the interviewees' reasons for being at the cemetery at the time of the interview.

Figure 4. Photo from Gamlebyen gravlund.

Figure 5. Photo from Gamlebyen gravlund.

Figure 6. Photo from Gamlebyen gravlund.