

伊丽莎白·R·M·黛尔，姜博，程宇：疗愈花园类型的概念界定[J]. 风景园林, 2024, 31 (5): 75-90.

# 疗愈花园类型的概念界定

著：(美) 伊丽莎白·R·M·黛尔 译：姜博 程宇

**摘要：**【目的】随着疗愈花园研究的不断深入，相关描述性术语也越来越多，很难区分不同类型的疗愈花园。通过明确疗愈花园类型，设计师和其他相关专业人员能更好地为客户和其他利益相关者提供信息，创造出更具针对性和响应性的设计，有效促进新项目的开发。【方法】建立疗愈花园类型层次框架，并以现有花园为例，分析每种类型疗愈花园的设计目的、设计重点和潜在用户。【结果】将疗愈花园类型层次框架的基本结构分为主动型（使能型）和被动型（恢复型）的双轨结构，明确了不同类型疗愈花园的区别和联系。【结论】“疗愈花园”一词常被用于描述医疗机构中的花园，而不同类型的疗愈花园之间存在一些重要区别。这些区别为疗愈花园的设计提供了依据，有助于在花园空间中开展高质量的活动，同时兼顾使用者的需求。疗愈花园的设计必须满足使用人群的特定需求，包括居民/患者、员工和家庭成员。

**关键词：**疗愈花园；恢复花园；使能花园；治疗花园；感官花园

中图分类号：TU986.5

文献标识码：A

文章编号：1673-1530(2024)05-0075-16

DOI：10.3724/j.fjyl.202312040543

收稿日期：2023-12-04

修回日期：2024-03-11

花园是人与自然互动最频繁的地方。如果花园设计的目的是治疗疾病，那么这种互动的益处应被最大化。许多医疗机构、持续护理中心和社区已经认识到花园对促进人类健康和提高幸福感的重要性，在上述环境中设置花园已变得越来越普遍。因此，疗愈花园应运而生，服务于不同需求的用户，被称为感官花园、治疗花园、恢复花园和使能花园等。大多数人都知道这些概念，但却很难描述它们的区别。设计师、治疗师、管理人员和其他利益相关者需要准确区分和描述不同类型疗愈花园的差异，特别是涉及他们自身的工作、相关专业人员的工作、客户的需求以及治疗空间的开发时。

## 1 概念界定

2013年，在维基百科可以搜索到65个花园类型，其中包括几类独特的花园，如松林花园、火景花园，甚至啤酒花园，但没有一个花园类型明显属于疗愈花园的范畴。天堂花园也榜上有名，但维基百科搜索内容对天堂花园的描述主要侧重于它作为围墙花园的早期历史。还有一类为“神圣的小树林”，但其含义指的是具有重要宗教意义的树林，而不是人工栽培的花园。禅宗花园可能与疗愈花园的关系最为密切，但对禅宗花园的描述依旧侧重于它作为

沉思和启迪之地的早期历史，而非疗愈之地。2017年，在维基百科可以搜索到67个花园类型，包括纪念花园、高床花园、感官花园和治疗花园，但仍然没有疗愈花园。感官花园是指可以提供多种感官刺激的花园空间，强调无障碍的重要性。对治疗花园的描述中包含着疗愈花园的属性，如满足使用者的生理、心理、社会和精神需求，但此类花园的设计重点“主要是将植物和友好的野生动物融入空间”。2023年，在维基百科可以搜索到87个花园类型。这一增长的主要原因是宗教花园和地域特色花园类型的增多，还包括一些新的花园类型，如“钥匙孔”花园、路边花园和远程互动花园。尽管有这些鲜为人知的花园类型，但疗愈花园仍未被列入名单。

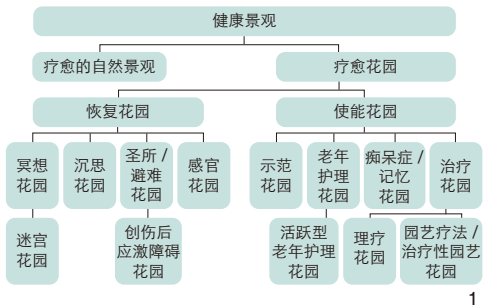
Pouya等<sup>[1]</sup>对疗愈花园的概念进行了研究，试图明晰疗愈花园是否存在区别于其他花园类型的某些特质。通过分析文化和历史资料、健康效益、环境心理学以及风景园林设计在花园中的角色，发现无论环境或设计如何，疗愈花园都需要能够“抚慰心灵，滋养精神”，其设计需要尊重花园与自然精神之间的关系。Pouya等并不是唯一对疗愈花园的概念进行界定的学者，相关研究都有过尝试，如“旨在产生积极的效果”“惠及各种用户”“包括丰富的植物”等措辞非常常见。医学中并不

存在“疗愈”的实际定义，这或许导致了疗愈花园缺乏特异性<sup>[2]</sup>。在西方医学中，“疗愈”通常与疾病的根除和治愈联系在一起<sup>[3]</sup>。近年来，“疗愈”一词已被广泛应用于寻求个人幸福的表达方式中，它可以指代包括身体、情感和精神健康在内的许多方面。在字典中，“疗愈”的定义是“使身体健全或完整、恢复健康，或使身体不理想的状态得到改善，即痊愈”。这一定义强化了“疗愈”这一概念的整体性，它不仅是治疗疾病的过程，也是克服问题或困境的过程。这正是进行疗愈花园体验的意义所在——使用者不一定能解决他们所面临的问题，但可以通过定期与大自然接触学会克服或应对困难。

疗愈花园的定义和益处如此宽泛，进一步突显了明确疗愈花园子类型的重要性。我们可以借助词典了解不同疗愈花园类型的区别，查找描述疗愈花园类型的形容词，如疗愈、沉思、体验、治疗等——虽然看起来是较基本的描述，但花园类型的区分可以依赖于语义上的细微差别，因此明确这些形容词的含义至关重要。本研究在将词语含义、现有研究和景观理论联系起来的过程中，建立了一个层次框架：位于第一层级的疗愈花园类型较为宽泛，位于以下层级的疗愈花园在设计元素方面则较为具体（表1）。值得注意

表1 疗愈花园类型与子类型的关系<sup>[4-5]</sup>  
Tab. 1 Relationships between healing garden types and sub-types<sup>[4-5]</sup>

类型	设计重点及需求	子类型	设计意图	设计元素
疗愈花园	通过缓解压力、焦虑和精神疲劳来恢复人的精神状态； 1) 为环境感知、社会支持、自然干预、安全感和运动提供机会； 2) 塑造远离性、延展性、迷人性和兼容性等恢复性环境特征	冥想花园	鼓励思考、反省或冥想；努力实现内心的平静或疗愈	便于安静思考的小房间或场地；景观焦点
		沉思花园	鼓励思考、反省或沉思；审视比自己更重要的事物	与设计意图相关的符号对象；可以远眺的景色
		圣所/避难花园	提供庇护和援助	用于提供庇护或保护的空间
		感官花园	刺激感官放松和兴奋	利用花园元素、植物和景色提供可靠且多样化的感官参与方式
	让每个使用者都能参与园艺活动； 1) 在花园内，可在各个层面与植物进行互动； 2) 花园里的活动需确保安全、不受干扰； 3) 提供符合人体工程学的设施，支持使用者独立使用	示范花园	展示无障碍花园的特色、材料和细节；向游客介绍无障碍园艺	高架花坛和垂直园艺系统、无障碍通道、符合人体工程学的设施和工具
		老年护理花园	创造生理及心理的无障碍环境	无障碍入口、位于视野开阔处的舒适座椅、遮阳设施、鼓励探索的特色设施和景观
		痴呆症/记忆花园	与老年护理花园类似，但加强了安全和指引方面的考虑	单一入口/出口；易于识别的参照点；环形路径；清晰的视线
		治疗花园	满足用户/患者和相关机构的治疗需求	可以激励用户/患者、促进治疗效果的要素和特征



1 疗愈花园类型层次框架  
Hierarchical framework of healing garden types

的是，尽管花园类型的概念是特定的，但这并不意味着花园设计可选择的手法很少，一个具有明确设计元素的花园可以通过多种方式形成。此外，由于花园是有生命的、不断生长的实体，没有两个完全相同的花园，因此不可能对任何花园类型给出绝对的定义。疗愈花园是以植物为主的室外绿色空间，其设计包含丰富的自然元素，可以通过多种感官体验减轻压力、改善健康。根据使用者和设施的不同进行分类，花园类型之间会存在重叠的情况。但不同类型花园的设计重点或设计意图是可以分类的，这也是本研究提出疗愈花园类型层次框架的目的所在。

## 2 建立层次框架

本研究在制定疗愈花园类型层次框架（图1）的层级结构时，将疗愈花园作为第一层级是较为合理的，而具体的花园类型则位于以下层级，这符合疗愈的整体性特点。疗愈与花园、自然息息相关，然而将疗愈花园

作为所有与自然相关的疗愈空间的总称，则意味着疗愈体验总是发生在花园中。花园是指通过某种方式加以利用的绿色空间，顾名思义，即“一块栽植了草药、水果、花卉或蔬菜的土地”。花园象征着某种特定事物的诞生，意味着它是一个经过塑造和培育的种植床，其中的植物是经过精心挑选和栽植的。那么，人类可以从中受益的自然景观又是怎样的呢？它可以被视为疗愈空间吗？答案是肯定的——对于一些人来说，自然景观空间是最具疗愈效果的空间，但它不能被定义为花园，因为它没有经过加工或改造，因此不属于疗愈花园的范畴。同样，并不是所有的自然空间都能提供积极的体验，因此将自然景观作为疗愈空间的总称并不恰当。Naomi Sachs 提出“健康景观”一词，并将其定义为任何能促进和支持人类健康与幸福的天然景观或经人工设计的景观。因此，“健康景观”作为一个广泛而明确的术语，可成为以植物和自然为主导、能够促进健康的空间的总称。

虽然本研究将重点介绍多种类型的疗愈花园，但有必要简要提及一些可以促进健康和疗愈的自然景观，包括森林、海岸线、山脉和草地等。被誉为美国风景园林奠基人的奥姆斯特德（Frederick Law Olmsted）曾写道：“自然风景能使人身心愉悦，锻炼人的心智，同时不会让人产生疲劳感；它能放松心情，又能激发活力；因此，借助精神对生理的影响，自然风景可以起到使人身心放松、恢复活力的功效。”<sup>[4]</sup> 日本的森林浴（shinrin-yoku）

即是一个广为人知的例子，它通过未被破坏的自然来促进健康和福祉。这种做法兴起于20世纪80年代，其发展具有双重目的，一方面是希望消除人们因科技进步所感受到的疲劳和倦怠，另一方面是鼓励人们与日本的森林重新建立联系<sup>[7]</sup>。自20世纪70年代以来，由于科学技术和城市化的快速发展，日本与压力相关的疾病发病率迅速上升。尽管森林浴是一种相对较新的做法，但它借鉴了日本的古老传统，即建立自然与人类之间的精神和美学联系。森林浴让人们与森林接触，并在平静和具有恢复性的氛围中放松身心。相关研究认为这种体验的关键是吸入芬多精（phytoncide）或木质精油<sup>[8]</sup>。许多研究报告称，森林浴能显著减轻压力，具体表现为皮质醇水平明显降低<sup>[9]</sup>、脉搏和血压降低<sup>[10]</sup>以及自然杀伤细胞增加。据报告，自然杀伤细胞能杀死肿瘤和被病毒感染的细胞<sup>[8, 11]</sup>。森林疗法采用结构化的森林浴方式，聘请经过培训的导师，注重森林与个人之间的互惠关系<sup>[12]</sup>。

美国园艺疗法协会（American Horticultural Therapy Association, AHTA）将疗愈花园定义为：“以植物为主的环境，包括绿色植物、鲜花、水和其他自然要素。它们通常与医院和其他医疗机构相关联，被医疗机构设计为疗愈花园，可供所有人使用，旨在对大多数使用者产生有益的影响。疗愈花园是为客户、访客和员工设计的休养场所，可根据他们的意愿来使用。”<sup>[13]</sup> Roger Ulrich 将疗愈花园定义为集多种元素于一体的户外空间，这些元素



可以有效缓解压力，并对患者、护理人员/工作人员、访客产生积极影响。Ulrich 指出被视作疗愈花园的空间应具备丰富的自然特征，如绿色植物、花卉和水体。同时，为确保疗愈花园的治疗功效，该空间应对广大用户，尤其是最脆弱的群体——患者产生积极影响<sup>[14]</sup>。疗愈花园专家 Clare Cooper Marcus 强调了疗愈花园中多感官体验的重要性。她指出花园通过多种感官体验吸引游客的程度越高，游客的疼痛率和对疼痛的感知率就越低。要想达到这一效果，花园中应包括五颜六色的鲜花、不同色调和质感的绿色植物、香气、野生动物、水景和水声，以及随微风而动的景观。植物与硬质景观的比例最好为 7 : 3<sup>[15]</sup>。她还指出，有证据表明来自朋友和家人的社会支持越多，患者的治愈效果也会越好<sup>[14]</sup>。因此，在医院的花园中提供半私密的谈话区并提供多种路径选择至关重要。当一个人进入医疗环境或随着年龄增长时，常常会感到自己无法掌控很多情况。一个人对事物的掌控能力越强，所承受的压力就越小。因此提供有多种选择的花园将有助于减轻压力，如通过融入多种路径、座位区、活动场所、植物、遮阳设施等来为人们提供多种选择<sup>[16]</sup>。

简而言之，疗愈花园是在多个层面以多种形式提供减压和疗养体验的环境。如前文所述，“疗愈”一词并不是一个明确的术语，它可以指身体康复、认知能力提高或情绪恢复等。因此，应进一步界定疗愈花园子类型的疗愈类型、使用者和效果。例如为儿童医院设计的疗愈花园和为患有阿尔茨海默病的老年人设计的疗愈花园在效益和成果方面应该有很大差异。

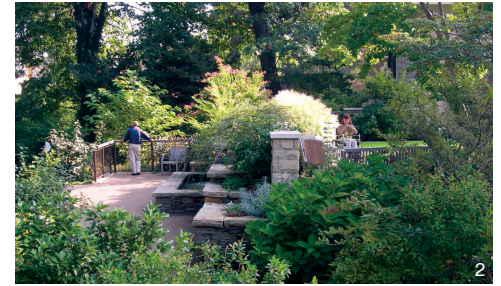
### 3 疗愈花园的分类

可以说，还有众多疗愈花园类型在本研究中尚未提及。结合研究目的——引入一个层次框架来对疗愈花园进行分类和定义，本研究只探讨存在多个实例的花园类型。预计未来在框架中将增加更多的花园类型。健康景观框架中的疗愈花园包含 2 个主要类型：恢复花园和使能花园。每个类型下都有子类型，本研究将进一步细分。

#### 3.1 恢复花园

恢复花园的定义由环境心理学领域先驱的研究和理论发展而来，包括支持性花园设计理论和注意力恢复理论（attention restoration theory, ART）。Ulrich 的支持性花园设计理论认为，花园的有效性主要取决于花园在增强人们的应对能力和减少压力方面的有效性<sup>[14]</sup>。Ulrich 还指出要缓解压力，花园必须具备 4 种特点：1）对事物可感知的实际的掌控，保证人们的隐私，使人们暂时逃离压力源；2）为来访游客、工作人员和患者提供社会支持；3）提供运动和锻炼的机会；4）提供植物、水和野生动物等自然干预<sup>[14]</sup>。他的理论进一步指出，当人们在花园中有安全感时，这 4 种特点才能有效发挥作用。当这些条件都具备时，花园就能成为恢复和缓解压力的场所，使人们更好地应对压力，从而改善健康状况<sup>[17]</sup>。

基于对环境心理学的研究，Kaplan 等对 Kaplan 所提出的注意力恢复理论进行了发展，该理论确定了有助于从定向注意力所引起的精神疲劳中恢复的体验类型。Kaplan 指出，以自然为主的环境往往对恢复体验特别有效<sup>[18]</sup>。景观或花园的 4 个特征对于实现恢复性目标至关重要。1）远离性。远离性指的是逃离压力源，至少是暂时逃离，可以是身体上的逃离，也可以是心理上的逃离，最好是两者兼顾。2）延展性。它关系到一个人逃离后所到地方的质量，这个地方需要给人提供一种真正逃离的感觉，它需要足够连贯和丰富，让人感觉是一个真实的环境，而不仅是新奇的、吸引人的信息（如屏幕上的数据）。如 Kaplan 等所言，这个地方应该给人一种“完全是另一个世界的感觉……它必须提供足够的内容供人们观看、体验和思考，从而占据一个人头脑的大部分空间”<sup>[19]</sup>。3）迷人性。迷人性指的是景观或花园中的温和刺激物——那些有趣但不需要过多关注的事物。一个典型的例子是花园中的蝴蝶在花丛间飞来飞去，人们可以全神贯注地欣赏蝴蝶，而不需要耗费精神力量。4）兼容性。兼容性指的是能否在花园中开展对使用者有恢复作用的活动<sup>[18]</sup>。花园里是否有蝴蝶可以观赏？是否有悦耳的声音可以倾听？是否有引人入胜的景观可以欣



2 克利夫兰植物园的伊丽莎白和诺娜·埃文斯恢复花园  
Elizabeth and Nona Evans Restorative Garden at the Cleveland Botanical Garden

赏？是否有舒适的地方供人散步或休憩，以便舒适地享受花园所提供的一切？游客能否轻松自如地进行这些活动？这些都是一个兼容性环境所应具备的内容。

Ulrich 和 Kaplan 提出的理论适用于任何类型的疗愈花园。但这些恢复性特征强调的是认知、情感和/或心理的恢复，而不是身体机能的恢复。对许多人来说，精神力量得到调整之后，身体机能也会随之改善，但精神力量的恢复是最主要的。以下 2 个典型的案例巧妙地结合了恢复性特征，创造了兼顾观赏与疗愈的空间环境，可以对使用者的身心产生积极影响。

一个是由 Dirtworks, PC 公司设计的位于美国克利夫兰植物园内的伊丽莎白和诺娜·埃文斯恢复花园<sup>[19]</sup>（图 2）。尽管花园毗邻繁忙的用餐露台和阅览空间的主景观，但围合的植物和石墙提供了一个安静的空间，强化了远离周围区域的感觉。水流缓缓落入浅水池，掩盖了附近的交通噪声，而芬芳馥郁、质感丰富的植物则让人心驰神往。人行道通向更多的私人座位区和可以观赏景色的高地势区域，可移动的家具让游客可以坐在自己喜欢的地方进行私人交谈或欣赏开阔的景色。

位于瑞典西南部的阿尔纳普康复花园（Alnarp Rehabilitation Garden）是恢复花园的另一个案例。此花园的使用者都是由医生、保险公司或雇主介绍而来的，他们因抑郁或精力匮乏而无法工作。此花园占地不足 2.02 hm<sup>2</sup>（5 英亩），分为多个花园空间。使用者可以在安静的、用树篱围起来的欢迎花园里放松，也可以在温室、菜园或果园里参与一些轻松

简单的园艺工作。他们可以沿着林间小道散步，也可以在宽阔的草地上休息。这个花园特意设计了各种室外活动空间，以便于适应大多数人的不同需求与精神状态，从而实现恢复花园的兼容性。这与上一个案例的设计手法截然不同<sup>[20]</sup>。

### 3.1.1 冥想花园

冥想花园是恢复花园的一个子类型。这种类型的花园融合了恢复性环境的特征，但也包括一些设计要素，这些要素可以作为个人寻求情感疗愈或身体疗愈的催化剂。动词“冥想”的定义是思考或反省，强调平静和专注。冥想还可以进一步定义为内省，努力实现内心的平静和治愈。在疗愈花园中具体的设计形式可以是设置一系列半私密的小型花园空间或被墙围合的空间，以促进使用者安静、平和的思考。

位于美国加利福尼亚州 Scripps McDonald 机构的 12 步花园（图 3）由 Schmidt 设计集团 Scott Hazard 设计，它是冥想花园的一个范例，现已被拆除。花园的设计使用了不同类型的土壤材料和茂密的植物，围合出 12 个不同的冥想和思考空间，代表着 12 步康复过程中的每一步。一系列的空间为独处或小组活动创造了独特的机会，连续或渐进的设计体验有助于治疗和康复的过程<sup>[21]</sup>。

迷宫花园（labyrinth garden）是冥想花园的一个子类型。传统的迷宫花园（maze garden）会设计一个谜题，需要人们集中注意力并做出抉择。本研究提到的迷宫花园不同于此，它能够促进人们进入冥想，通常指独自一人精神漫步。在迷宫花园中漫步后再返回到外面的世界，是一次自我的安静之旅<sup>[22]</sup>。它为人们提供了一个穿过花园空间时思考问题的机会，让人们无需考虑自己的目的地。从设计的角度来看，迷宫花园结合了圆形（整体性）和螺旋形（自然世界和变化）的象征意义，形成一条有方向变化但无需抉择的路径。花园所使用的材料可以有多种选择，但应尽量简洁以促进深入思考而非分散注意力。道路之间通常使用单一类型的植物进行分隔，而路面可使用石头、砾石或耐用的地面覆盖物等天然材料。

埃洛伊丝·佩吉纪念迷宫花园位于美国佛罗里达州盖恩斯维尔市的卡纳帕哈植物园内，是一座有 7 条环路的古典风格迷宫。白色砾石小径与麦冬（*Ophiopogon japonicus*）相间的简洁设计形成了良好的视觉对比，使人在行走时不必关注脚下的每一步，而是能够专注于自己的思绪。郁郁葱葱的草丛在微风中摇曳，从不同的角度折射阳光，在简单而有效的设计中创造丰富的感官体验。迷宫坐落在一个轻微下凹的洼地之中，周围环绕着树木，这也是迷宫的恢复价值所在。但正如迷宫花园的设计目的一样，最好的恢复体验来自沿着小路安静地散步。

### 3.1.2 沉思花园

根据词典中的定义，沉思是一种专注于精神事物的个人祈祷形式。沉思花园可能与冥想花园相似，但沉思花园往往更强调精神上或宗教方面的意义。这并不一定需要在花园的设计上做出重大改变，但它的设计提倡在花园中加入特定的象征性元素或代表性元素作为思考的催化剂。正如冥想可以被认为是“向内看”，努力实现内心的平静和治愈，而沉思通常被定义为“向外看”，审视比自己更重要的问题。这种区别可以说明，在花园中设置可以远眺的景色有助于促进对外部环境的审视。

位于美国波士顿的马萨诸塞州综合医院霍华德·乌费尔德疗愈花园（图 4）由 Halvorson 设计公司设计，它是沉思花园的一个范例<sup>[23]</sup>。该花园位于医院 8 层的屋顶，视野开阔，但花园本身并不大，只有约 603.87 m<sup>2</sup>（6 500 平方英尺），给人一种亲切感。花园被设计成一个休憩场所，包括漂亮的柚木座椅、丰富的植物以及雕塑和水景，更有城市天际线和查尔斯河的迷人景色。玻璃护栏不会遮挡美景，有助于人们思考自我之外的事物。从设计角度来看，冥想花园和沉思花园都应包含恢复花园的组成部分，以及特定的思想催化剂，如“标本”植物、景观要素或安静舒适座位旁的景色。这些催化剂将使花园与众不同。

### 3.1.3 圣所/避难花园

恢复花园的另一个子类型是圣所/避难花园。“圣所”一词被定义为神圣的地方，或

可以提供保护的避难所。关注这一定义福祉方面的含义——避难所和保护，可为物质空间的设计提供方向。避难所的定义是提供庇护或保护的地方，以及人们在遇到困难时可以求助的地方。该定义的后半部分谈到了花园的作用，即人们在困难中求助的“东西”就是花园空间。虽然恢复性空间的特点（远离性、延展性、迷人性、兼容性）在圣所/避难花园中必不可少，但这种类型的花园更需要具体的设计要素，包括能够提供庇护和保护的空间元素。

冥想花园的设计应包括一些象征性实体元素，同样圣所/避难花园的设计也应包括对空间中顶面和立面的处理，以在物理空间上营造庇护或保护的感觉，帮助人们在这种环境下恢复。如前文所述，这种花园类型使用了一些特定的设计元素，但这并不意味着完成此设计可选择的设计手法很少——创造性的种植设计、精心融入的建筑特色和景观焦点，有多种方法可以在花园中创造出庇护空间。

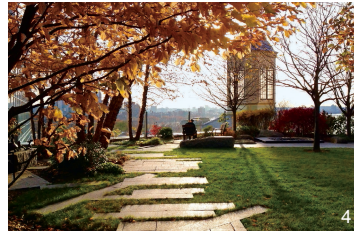
由 Design for Generations 公司<sup>[24]</sup>设计的“生命之礼”家庭住宅花园是小型圣所/避难花园的一个案例，主要为器官移植患者及其家属提供服务。该花园位于家庭住宅中，这些住宅是为到城市中接受器官移植的患者提供的经济承受范围之内的临时住房。花园被砖墙和茂密的植物围合，是一个远离压力源的避难所。花园中的喷泉是景观设计的亮点，有助于缓解噪声的影响。事实证明，此花园是所有到访家庭住宅的人心中的理想休憩之所。

创伤后应激障碍（post-traumatic stress disorder, PTSD）花园可被视为圣所/避难花园的一个子类型，旨在为经历过巨大精神创伤的人提供恢复性体验。虽然 PTSD 通常与服役有关，但也可能与其他非战争经历有关。PTSD 治疗的基本原则之一是创造安全的环境，让患者感觉自己受到庇护，避免潜在的伤害。精神创伤专家指出，在治疗开始前，个人的安全感优先于其他所有因素<sup>[25]</sup>。被保护的感觉会让人更容易感到放松和安全，从而承担可控的风险，实现自我理解和治愈。还有比精心设计的疗愈花园更好的环境能提供安全感、保护和庇护吗？安全的场地是设计 PTSD 花园





3 位于加利福尼亚州Scripps McDonald机构12步花园的12个空间之一  
One of the 12 rooms of the 12 Step Garden at Scripps McDonald in California  
4 从马萨诸塞州综合医院霍华德·乌费尔德疗愈花园眺望查尔斯河方向  
View toward the Charles River from the rooftop Howard Ulfelder Healing Garden  
at Massachusetts General Hospital



5 位于萨里郡作战应激机构总部的作战应激恢复花园  
Combat Stress Therapeutic Garden located at the headquarters of Combat Stress  
in Surrey  
6 缅因州海岸植物园勒纳五感花园  
The Lerner Garden for the Five Senses at the Coastal Maine Botanical Gardens



的重点。花园需给人安全感，视野开阔，没有隐蔽的角落。有围墙或封闭庭院的花园是最佳选择，因为它能提供庇护和保护。在此类花园中，提供避难所和有安全感的场所是基础，但患者积极参与并进行团队合作也很重要，这有助于 PTSD 患者慢慢融入他人，和有相似兴趣和经历的人一同开启疗愈之旅。

作战应激恢复花园（图 5）位于英国萨里郡莱瑟黑德的作战应激机构总部，这是一家致力于帮助退伍军人及其家属解决心理健康问题的慈善机构。该花园由 Fi Boyle 与 Independent Gardening 有限公司合作设计，旨在抚慰 PTSD 患者及其家属，并为他们提供积极参与花园维护的机会。花园的设计包括开阔的视野和高靠背的长椅，为使用者营造一种不会被偷袭的庇护感。种植的植物大多比较低矮，其中一些“标本”植物既划分了空间，又不会遮挡视线。花园既有供私人思考和交谈的小空间，也有供小组工作或开会的大区域。

#### 3.1.4 感官花园

本研究介绍的最后一类恢复花园是感官花园，顾名思义，这是一种旨在刺激人们感官的花园。任何精心设计的花园都应该能刺激人们的感官，但真正的感官花园应特别强调植物、感官要素和空间布局，可以在一年之中持续地提供多种感官刺激的机会和体验。这些感官体验应该是有规划的、可重复的，而不仅是偶尔为之。精心设计的感官花园可以同时起到刺激和放松的作用。

位于美国缅因州海岸植物园的勒纳五感花园（图 6）由 Herb Schaal 设计，是感官花园的一个范例。该花园设计了不同的区域，通

过植物、雕塑、座椅、水景和其他硬质景观元素来唤起每一种感官体验。随着游客在花园中穿梭，各种空间相互融合，多种感官也被充分调动。花园中不同区域的选址都是经过深思熟虑的，如“视觉”花园位于地势最高的位置。感官花园设置于植物园主入口附近，其目的是提高游客的感官敏锐度，以便他们在游览期间更好地欣赏植物园的其他区域。在感官花园中，可以通过多种创造性的方式来调动游客的嗅觉、触觉、听觉、视觉和味觉。值得强调的是，恢复体验的主要目的是恢复人的精神力量。因此，恢复花园和本研究所探讨的所有子类型花园均是为人民的被动式体验而设计的，旨在治愈或恢复人的精神力量，而不是恢复人的身体机能。人们可以在花园里散步、休憩，也可以在花园里社交，不需要人们主动去体验。

#### 3.2 使能花园

使能花园是疗愈花园的另一种主要类型，是为人们的主动参与行为而设计的。这类花园与恢复花园并行，重点是帮助和改善使用者的身体机能。随着使用者身体机能的恢复，他们的精神和情绪往往也会得到改善，这与恢复花园的情况相反。但使能花园的主要关注点是疗愈花园体验中更积极主动的部分。

如前文所述，与“恢复花园”对应的是“使能花园”。“使能”的定义是提供手段或机会，或使其变得可能、实用或容易。使能花园致力于让每位使用者都能在花园中进行活动和体验。无论使用者是否患有残疾或处于何种状态，花园旨在消除或缓解他们所面对的困难。例如，可使用高架花坛将植物

提升到一定高度，让那些使用轮椅、助行器或无法弯腰的人也能与植物互动。方形的园艺框架和鲜艳的颜色可以帮助视力不佳的人更好地观察和欣赏植物。吊篮滑轮系统等符合人体工程学的工具和设计可以帮助患有有关节炎或握力不佳的人。使能花园作为一种花园类型，以园艺为主要目标，将重点放在无障碍设计上，而不是恢复精神力量。一旦消除了花园中主动体验的生理和心理障碍，花园就可以提供各种类型的恢复体验，包括恢复精神力量。

##### 3.2.1 示范花园

使能花园至少有 3 个子类型，第一个是示范花园。示范花园通常会在现场提供一些治疗方案。但由于示范花园往往设置在较大的植物园内，它产生的最大的影响在于向游客科普支持性元素和园艺治疗方案。对于一般公众来说，了解花园中的无障碍问题通常是理解疗愈花园设计目的的第一步。

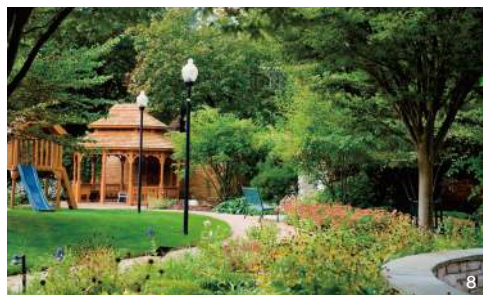
芝加哥植物园的布勒使能花园（图 7）由 Missy Marshall 设计，是示范花园的一个范例。虽然该花园设置了一些治疗性园艺项目，但其主要目的是教游客如何开展无障碍园艺。园内有许多无障碍花坛、水景、垂直园艺结构和工具等创意范例。这些材料、布局和设计细节都说明无障碍设施可以非常美观，并能与整个园林设计完美融合。

##### 3.2.2 老年护理花园

使能花园的第二个子类型是老年护理花园，它是为疗养院、辅助护理场所、成人日间护理场所和其他专门为老年人提供护理的场所而设计的花园。这类花园必须是无障碍



7 芝加哥植物园的布勒使能花园  
Buehler Enabling Garden at the Chicago Botanic Garden



8 家庭生活中心索菲亚·路易斯·德布里奇-韦格生活花园  
Sophia Louise Durbridge-Wege Living Garden at the Family Life Center



9 肯尼迪·克里格研究所门诊治疗花园  
The Outpatient Therapy Garden at the Kennedy Krieger Institute

的，应方便人们进行园艺活动、在花园中散步或只是舒适地坐在花园中。对于面向老年人的花园设计来说，身体上的无障碍必不可少，心理上的无障碍也很关键。老年人在花园中是否感到舒适和安全？是否有架空结构或植物来延伸室内/室外空间，以缓和光线和温度的变化？对于那些不愿意走得太远的人来说，是否有机会坐在靠近建筑物的地方，同时仍能感觉到自己处于花园之中？当老年人越来越喜欢深入花园中时，是否有新的景观和座椅来支持和鼓励这种渐进式的探索？在花园中合理地设置栏杆，可以帮助使用者在花园中穿行并在景观节点处舒适地停留。树荫对任何花园都很重要，对老年护理花园的重要性尤为显著。

活跃型老年护理花园是老年护理花园的一个子类型，其设计考虑了更多的活动和运动。这种类型的花园更适合身体素质相对较高的使用者。它可以让人们利用高架花坛进行积极的园艺活动，为人们提供锻炼身体的区域，以及为长时间散步的人提供不同的路径。室外游戏区（如沙狐球区或高尔夫球场）可增加花园中的社交机会和体育活动机会。

### 3.2.3 痴呆症/记忆花园

此类型的花园包括一些非常特殊的设计元素，以便为痴呆症患者提供安全和积极的户外体验。例如，尽可能设计单一的出入口和易于识别的参考点，以帮助使用者游览花园<sup>[29]</sup>。小径的路线应具有引导性，使用者不需要为走哪条路而做选择。尽量使用单一的地面颜色，否则地面颜色的变化易被痴呆症患者误解为地面存在高差。鉴于徘徊是痴呆症

患者的一个主要问题，因此花园中应设置没有视线干扰的安全屏障，以保证使用者的安全，同时不会产生被囚禁的感觉<sup>[29]</sup>。由 Martha Tyson 设计的索菲亚·路易斯·德布里奇-韦格生活花园（图 8）是痴呆症/记忆花园的范例。该花园专门为阿尔茨海默病和痴呆症患者设计，花园只有一个入口和一条简单的环形小径以鼓励患者步行。由于患者不必做出向左走或向右走的选择，也不必记住从哪个门返回，避免了患者记忆混淆。园内有一个瀑布，可提供令人舒适的景观和舒缓的声音，同时瀑布的位置避免了使用者爬进去的可能性。园内有許多患者年轻时可能很喜欢的多年生植物，在工作人员的引导下这些植物可以为患者提供回忆的机会。在此花园中，园艺治疗活动往往在一个小花园和果园区进行。

在澳大利亚，Banora Point 老年痴呆症花园<sup>[27]</sup>通过设置包含晾衣绳、折叠长椅、鸡笼和高架菜园床等设施的活动场所，为患者提供认知和感官刺激。这些活动场所经过精心设计，旨在让患者能够与员工和家人一起进行熟悉、愉快且有意义的活动。一个试点项目显示，参与了花园活动的患者健康状况有了显著改善，他们的康奈尔痴呆抑郁量表评分降低了 21%，言语和肢体攻击等无法控制的行为的出现减少了 30%。

### 3.2.4 治疗花园

使能花园的第三个子类型是治疗花园。治疗花园的重点是对某种疾病的治疗、干预。“治疗”的定义是通过药剂或某种方法治疗疾病或身体失调。治疗花园应有利于病人或客户的处方治疗，帮助相关机构达到治疗效果。因

此，就像治疗某种疾病的药物需要产生预期效果一样，治疗花园的设计应能产生可预期的结果。治疗花园通常被设计为职业治疗、物理治疗或园艺治疗等治疗项目所需环境的组成部分，它可以作为室内治疗项目区域的拓展而独立存在，也可以作为更大的治疗花园的一部分。

理疗花园是治疗花园的一个子类型，其设计目的是促进身体康复，并提供一个可以设定并持续衡量预期效果的环境。由 Mahan Rykiel 事务所设计的肯尼迪·克里格研究所门诊治疗花园（图 9）是理疗花园的一个范例，该花园为患有脑部、脊髓、肌肉骨骼系统疾病的儿童和青少年提供服务。花园的设计可以辅助治疗人员的工作，它由一系列室外空间组成，为患者提供了物理治疗和认知治疗的场所。设计师采用了多种空间尺度、铺装模式、纹理以及高差变化，并将它们与一系列水元素相联系，以吸引儿童们的到来。

园艺疗法/治疗性园艺花园是治疗花园的另一个子类型，旨在利用植物和以植物为基础的活动作为治疗干预措施，以达到医疗机构的预期效果并完善患者的治疗计划。园艺疗法/治疗性园艺花园由训练有素的园艺治疗师管理。有些花园是完全无障碍的，避免任何事物妨碍人们种植植物的体验。有些花园则结合了园艺疗法和康复治疗元素，包括各种类型的高架花坛、步行路面、高差变化以及其他有助于治疗的细节。由 Douglas Hills 事务所设计的美国芝加哥施瓦布康复医院屋顶治疗花园（图 10）提供了多个治疗与康复项目，旨在最大限度地发挥以植物为基础的园艺治疗活动的疗效。园艺治疗师采用综合





10 施瓦布康复医院屋顶治疗花园  
The therapeutic rooftop garden at Schwab Rehabilitation Hospital

治疗的方式，将多种方法纳入治疗课程，涉及身体、职业、语言、心理、娱乐和社交等内容，以达到运动协调、放松、休闲技能训练、感官刺激的目标。

#### 4 结论

本研究建立了疗愈花园类型层次框架。虽然此框架可以为每种花园类型的设计和功组成提供总体指导原则和概念，但这些指导原则和概念并不是绝对的；花园类型必然存在重叠，且花园的功能也不是唯一的。本研究建立层次框架的目的在于探讨不同类型疗愈花园的区别和联系。另外此框架并不是完整的，根据花园的主要功能可以加入更多的花园类型，也可以改变花园类型的定位。但是该框架的基本结构——将花园主要分为被动型（恢复型）和主动型（使能型）的双轨结构，应保持不变。

疗愈花园类型层次框架（如本研究所介绍的框架）至关重要，据此专业人士才能明确且有依据地区分和描述疗愈花园的类型，避免模糊不清的描述，以防疗愈花园的科普、推广与发展受到阻碍。用清晰的文字来定义疗愈环境将使疗愈花园的规划、设计和建设变得更容易，也有利于对疗愈花园的设置、活动开展情况与成果进行比较和评估。

#### 致谢：

衷心感谢薛滨夏博士一直以来的支持与合作。

#### 参考文献 (References)：

[1] POUYA S, DEMIREL Ö. What Is a Healing Garden?[J].

Akdeniz University Journal of the Faculty of Agriculture, 2015, 28 (1): 5-10.

[2] EAGNEW T R. The Meaning of Healing: Transcending Suffering[J]. The Annals of Family Medicine, 2005, 3 (3): 255-262.

[3] LUDMERER K M, STANLEY J M. Learning to Heal: The Development of American Medical Education[J]. Nursing History Review, 1999, 7(1).

[4] ULRICH R S. Effects of Healthcare Environmental Design on Medical Outcomes[C]// International Academy for Design and Health. Design and Health: Proceedings of the Second International Conference on Health and Design. Stockholm: Svensk Byggtjänst, 2001: 49-59.

[5] KAPLAN R, KAPLAN S. The Experience of Nature: A Psychological Perspective[M]. Cambridge: Cambridge University Press, 1989.

[6] OLMSTED F L, ROPER L W. The Yosemite Valley and the Mariposa Big Trees: A Preliminary Report (1865)[J]. Landscape Architecture, 1952, 43 (1): 12-25.

[7] An Darach Forest Therapy. The Origins of Forest Bathing[EB/OL]. (2023-06-18)[2023-10-15]. <https://silvotherapy.co.uk/articles/the-origins-of-forest-bathing>.

[8] LI Q. Effect of Forest Bathing Trips on Human Immune Function[J]. Environmental Health and Preventive Medicine, 2010, 15: 9-17.

[9] ANTONELLI M, BARBIERI G, DONELLI D. Effects of forest Bathing (Shinrin-Yoku) on Levels of Cortisol as a Stress Biomarker: A Systematic Review and Meta-Analysis[J]. International Journal of Biometeorology, 2019, 63 (8): 1117-1134.

[10] PARK B J, TSUNETSUGU Y, KASETANI T, et al. The Physiological Effects of Shinrin-Yoku (Taking in the Forest Atmosphere or Forest Bathing): Evidence from Field Experiments in 24 Forests Across Japan[J]. Environmental Health and Preventive Medicine, 2010, 15: 18-26.

[11] LI Q, MORIMOTO K, KOBAYASHI M, et al. Visiting a Forest, but not a City, Increases Human Natural Killer Activity and Expression of Anti-Cancer Proteins[J]. International Journal of Immunopathology and Pharmacology, 2008, 21 (1): 117-127.

[12] Association of Nature and Forest Therapy Guides and Programs. What Is Forest Therapy?[EB/OL]. (2012-06-30)[2023-10-16]. <https://www.natureandforesttherapy.earth/about/the-practice-of-forest-therapy>.

[13] American Horticultural Therapy Association. Horticultural Therapy: History and Practice[EB/OL]. (2016-11-20)[2023-11-20]. <https://www.ahta.org/about-horticultural-therapy>.

[14] ULRICH R S. Effects of Gardens on Health Outcomes: Theory and Research[M]// MARCUS C C, BARNES M. Healing Gardens: Therapeutic Benefits and Design Recommendations. New York: John Wiley & Sons, 1999: 27-86.

[15] American Society of Landscape Architects. Interview with Clare Cooper Marcus[EB/OL]. (2017-10-20)[2023-10-15]. <https://www.asla.org/ContentDetail.aspx?id=52023>.

[16] MARCUS C C. Healing Gardens in Hospitals[J]. Interdisciplinary Design and Research E-Journal, 2007, 1 (1): 1-27.

[17] ULRICH R S. Health Benefits of Gardens in Hospitals[C]// Paper for Conference, Plants for People. Haarlemmermeer: International Exhibition Floriade, 2002.

[18] KAPLAN S. The Restorative Benefits of Nature: Toward an Integrative Framework[J]. Journal of Environmental

Psychology, 1995, 15 (3): 169-182.

[19] American Society of Landscape Architects. General Design Award of Honor: The Elizabeth & Nona Evans Restorative Garden Cleveland Botanical Garden, Cleveland, Ohio[EB/OL]. (2006-06)[2023-10-15]. <https://www.asla.org/awards/2006/06winners/294.html>.

[20] IVARSSON C T, GRAHN P. Patients' Experiences and Use of a Therapeutic Garden: From a Designer's Perspective[J]. Schweizerische Zeitschrift für Forstwesen, 2010, 161 (3): 104-113.

[21] Scott Hazard Studio. Scripps Hospital: McDonald's Center 12-Step Garden[EB/OL]. [2023-10-15]. <https://www.scotthazardstudio.com/work#/scripps-hospital-mcdonalds-center-12-step-garden>.

[22] MARK J J. Labyrinth[EB/OL]. (2018-04-16)[2023-10-15]. <https://www.worldhistory.org/Labyrinth>.

[23] Halvorson Tighe & Bond Studio. MGH Healing Garden at Yawkey Cancer Center[EB/OL]. (1980-01-01)[2023-10-15]. <https://www.halvorsondesign.com/ulfelder-healing-garden>.

[24] Design for Generations, LLC. The Gift of Life Family House[EB/OL]. (2019-11-13)[2023-10-15]. <https://designforgenerations.com/case-studies/the-gift-of-life-family-house>.

[25] MOTTERSHEAD R, GHISONI M. Horticultural Therapy, Nutrition and Post-Traumatic Stress Disorder in Post-Military Veterans: Developing Non-pharmaceutical Interventions to Complement Existing Therapeutic Approaches[J]. F1000Research, 2021: 10.

[26] COCHRANE T G. Gardens That Care: Planning Outdoor Environments for People with Dementia[M]. Adelaide: Alzheimer's Australia SA Inc, 2010.

[27] MARSHALL C. Flagship Dementia Care Garden Sets New Standard in Patient Care[EB/OL]. (2011-01-01)[2023-10-15]. <https://www.abc.net.au/local/stories/2011/02/23/3146583.htm>.

#### 图表来源：

图 1 由作者绘制；图 2 由 Dirtworks, PC 提供；图 3 由 Scott Hazard 拍摄；图 4 由作者拍摄；图 5 由 Fi Boyle 提供；图 6 由 Jack Carman 拍摄；图 7 由作者拍摄；图 8 由 Martha Tyson 拍摄；图 9 由 Mahan Rykiel 事务所提供；图 10 由 Douglas Hills 事务所提供；表 1 由作者根据参考文献 [4][5] 绘制。

(编辑 / 边紫琳)

#### 作者简介：

(美) 伊丽莎白·R·M·黛尔 / 女 / 硕士 / 美国注册园艺治疗大师 / 佛罗里达大学环境园艺学院讲师 / 研究方向为园艺疗法、疗愈花园和治疗性园艺项目

#### 译者简介：

姜博 / 女 / 哈尔滨工业大学建筑与设计学院在读博士研究生 / 寒地城乡人居环境科学与技术工业和信息化部重点实验室成员 / 研究方向为自然疗愈与康复景观、健康人居环境设计

程宇 / 女 / 哈尔滨工业大学建筑与设计学院在读硕士研究生 / 寒地城乡人居环境科学与技术工业和信息化部重点实验室成员 / 研究方向为疗愈景观

# Conceptual Definitions of Healing Garden Types

Author: (USA) Elizabeth R. M. Diehl Translators: JIANG Bo, CHENG Yu

**Abstract:** [Objective] As the occurrence of healing gardens have increased, so too have the terms used to describe them, making it difficult to distinguish one type from another. When the distinctions between healing garden types are understood, designers and other allied professionals can better inform clients and other stakeholders, create more intentional and responsive designs, and effectively contribute to the development of new projects. [Methods] This paper presents a framework that describes the design purpose, design focus, and potential users of each type of healing garden, including existing gardens as examples. [Results] The basic structure of the hierarchical framework of healing garden types is divided into a dual track structure of primarily passive (restorative) and primarily active (enabling), which clarifies the differences and

connections between different types of healing gardens. [Conclusion] The term “healing garden” is often used to describe any garden in healthcare settings when in fact there are some important differences between healing garden types. These distinctions inform the design of the healing gardens, support high quality programming in the space, and ensure that the needs of the users are considered. Healing gardens must be designed to meet the specific needs of the populations utilizing them, including residents/patients, staff, and family members.

**Keywords:** healing garden; restorative garden; enabling garden; therapeutic garden; sensory garden

A garden is where most human-nature interactions take place. When the garden is designed to be healing then the positive benefits of that interaction should be maximized. Many healthcare facilities, continuing care residences, and community organizations have embraced the garden’s importance in contributing to human health and wellbeing and its inclusion in these settings has become more commonplace. As a result, many healing gardens have arisen that serve different users with different needs. These gardens are labeled as sensory, therapeutic, restorative, and enabling, among others. Most people recognize these terms of healing but find it difficult to describe their distinctions. It is essential that designers, therapists, administrators, and other stakeholders can accurately distinguish and describe the variations in healing garden types, especially as they relate to their own work, that of allied professionals, the needs of clients, and the development of additional therapeutic spaces.

## 1 Conceptual Definition

A 2013 search for types of gardens on Wikipedia yielded 65 types. Surprisingly, not a single garden type clearly fell into the realm of healing gardens, despite the fact that there were

several unique gardens included, such as pinetum, firescape garden, and even beer garden. Paradise garden was on the list, but its description focused on its early history as a walled garden. There was a sacred grove, but that entry referred to a grove of trees with significant religious importance rather than a cultivated garden. The Zen garden was perhaps most closely related to the healing garden, but the description focused more on its early history as a place of contemplation and enlightenment than healing per se. A Wikipedia search in 2017 listed 67 garden types and included memorial garden, raised bed gardening, sensory garden, and therapeutic garden, but still not healing garden. The sensory garden description referred to a garden space with multi-sensory opportunities and acknowledged the importance of accessibility. The therapeutic garden description incorporates healing garden attributes such as meeting physical, psychological, social, and spiritual needs of the users. But it also stated that the garden’s focus is “primarily on incorporating plants and friendly wildlife into the space.” A 2023 Wikipedia search yielded 87 garden types. This increase was due largely to the addition of religious and country of origin gardens but also included a few additions such as keyhole garden, road verge, and telegarden. Despite these lesser-known examples, healing

garden was still not on the list.

Pouya et al.<sup>[1]</sup> explore the definition of a healing garden in an attempt to determine if there are certain qualities of a healing garden that distinguish it from other garden types. They discuss cultural and historical references, health outcomes, and the role of environmental psychology and landscape architectural design. They conclude that no matter the setting or design, a healing garden must “comfort the soul and renew the spirit” and honor the relationship between the design and the spirit of nature. Pouya et al. are not the only authors to broadly define healing gardens; most of the literature does. Phrases such as “designed to produce positive outcomes,” “benefit a variety of users,” and “include an abundance of plants” are quite commonly found. This lack of specificity may be underscored by the fact that an operational definition of healing does not exist in medicine<sup>[2]</sup>. In the context of Western medicine, it is often associated with disease eradication and cure<sup>[3]</sup>. In recent years, the term healing has become a widely used expression in the quest for personal wellbeing and can refer to many things including physical, emotional, and spiritual wellness. The dictionary definition of “to heal” is to “make sound or whole; to restore to health; or to cause an undesirable condition to be overcome: mend.”



Tab. 1 Relationships between healing garden types and sub-types<sup>[1-3]</sup>

types	design focus and requirements	sub-types	design intent	design elements
restorative garden	The primary focus of a restorative garden is to restore and strengthen one's mental capacity by reducing stress, anxiety, and mental fatigue: 1) Offer opportunities for environmental perceived, social support, natural distractions, sense of security, and movement; 2) offer opportunities for being away, extent, fascination, and compatibility	meditation garden	encourage thought, reflection, or meditation; work toward inner peace or healing	small rooms or enclosures that facilitate quiet reflection; focal points
		contemplation garden	encourage thought, reflection, or contemplation; examination of things larger than oneself	relevant symbolic objects; creation of long views
		sanctuary/refuge garden	provide refuge and recourse	spatial planes used to create shelter or protection
		sensory garden	stimulate senses to relax and excite	garden elements, plantings, and views that provide reliable and diverse sensory engagement
healing garden	The primary focus of an enabling garden is to make the physical activity of gardening accessible to every user: 1) Include garden features that allow interaction with plants at all levels; 2) ensure safe and uninterrupted movement in the garden; 3) provide ergonomic features that support independent functioning	demonstration garden	showcase accessible garden features, materials, and details; educate visitors on accessible gardening	raised beds and vertical gardening systems, accessible pathways, ergonomic features and tools,
		eldercare garden	physical and psychological accessibility	extended overhead thresholds, comfortable seating in view, shade, features and views to encourage exploration
		dementia/memory garden	similar to eldercare garden but enhanced safety and navigation considerations	single entrance/exit; easily identifiable reference points; looping paths; clear sightline
		therapeutic garden	support treatment goals of the clients/patients and the facility with which it is associated	components and features that motivate clients/patients and facilitate measuring treatment outcomes

This definition reinforces that healing is a wholistic concept and is not solely about curing disease but also the process of overcoming an issue or transcending difficult circumstances. That is precisely what a healing garden experience is about — a user can't always eliminate the issue they are facing but can learn to overcome or successfully cope through regular contact with nature.

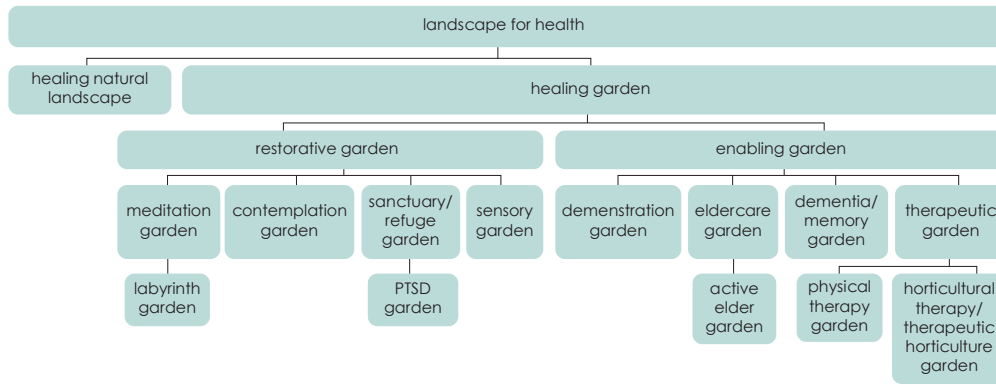
The fact that the definition and benefits of healing gardens are so broadly conceived underscores the importance of further defining the various subsets of healing gardens. Once again, a dictionary can help shed some light on these distinctions. Looking up the adjectives describing healing garden types — words like healing, contemplation, enabling, therapeutic, etc. — may seem rudimentary, but because garden types can rely on semantic nuances it is crucial to be clear on the definition of these words. In linking definitions, existing research, and landscape theory, a hierarchical framework emerges with the broadest healing garden types at the top and the healing

gardens below them becoming more specific in terms of their design elements (Tab. 1). It is important to note that even though the definition of a garden type is specific, that does not mean that the garden itself has few options in terms of its design. A garden with defined design elements can be created in a multitude of ways. In addition, because gardens are living, growing entities and no two gardens are exactly the same, it is impossible to create an absolute for any garden type. A healing garden is an outdoor green space, dominated by plants, that has been designed with an abundance of natural elements that reduce stress and improve health through a multisensory experience. There is bound to be some overlap between garden types depending on the users and the facility. But the main focus or intent of the garden can be categorized, and that's the purpose of this healing garden framework.

## 2 Establishing the Hierarchical Framework

When laying out the hierarchical framework

(Fig. 1), initially it seemed reasonable that the healing garden should be the overarching category, with more specific garden types falling below it. This matched with the wholistic quality of healing as it related to gardens and nature. However, using the term healing garden as the umbrella term for all nature-related healing spaces implies that these experiences always occur in gardens. A garden is a green space that has been manipulated in some way; by definition, “a plot of land where herbs, fruits, flowers, or vegetables are cultivated.” A garden implies that something has been created, that a plant bed has been shaped and cultivated, and plants have been selected and planted. What about the many natural landscapes where humans experience benefits? Can they be considered healing spaces? Of course — they are the most healing spaces for some people. They cannot be defined as gardens because they have not been manipulated or created and, therefore, do not fall under the healing gardens category. By the same token, not all natural spaces provide positive experiences and therefore natural landscapes does



1 Hierarchical framework of healing garden types

not serve well as the umbrella term. Naomi Sachs coined the term “landscapes for health,” defining them as any wild or designed landscape that promotes and supports human health and well-being. Landscapes for health, as a broad but defining term, therefore serves as the umbrella term for all plant-dominated and nature-dominated spaces that support health.

Although this paper will focus on the many varieties of healing gardens, it is important to briefly mention some of the many examples of natural landscapes that promote health and healing. Forests, coastlines, mountains, and meadows are among these landscapes. Frederick Law Olmsted, credited as the founder of American landscape architecture, wrote: “Natural scenery employs the mind without fatigue and yet exercises it; tranquilizes it and yet enlivens it; and thus, through the influence of the mind over the body, gives the effect of refreshing rest and reinvigoration to the whole system”<sup>[9]</sup>. A well-known example of untouched nature to promote health and wellbeing is the Japanese concept of “shinrin-yoku” or forest bathing. This practice emerged in the 1980s and was developed with the dual purpose of counteracting the burnout from technology fatigue and encouraging citizens to reconnect with Japan’s forests<sup>[7]</sup>. The incidence of stress-related illness in Japan has rapidly increased since the 1970s due to the swift advancement of technology and

urbanization. Although a relatively new practice, forest bathing draws on ancient Japanese traditions of spiritual and aesthetic connection between nature and humans. Forest bathing is practiced by contact with the forest and taking in the calming and restorative atmosphere to with the goal of improving one’s state of physical and mental relaxation. A key aspect of the experience is believed to be the breathing in of phytoncides, or wood essential oils<sup>[8]</sup>. Significant reductions in stress as a result of forest bathing have been reported in many studies and demonstrated by significantly decreased cortisol levels<sup>[9]</sup>, lower pulse rate and blood pressure<sup>[10]</sup> and an increase in natural killer cells, which have been reported to kill tumors and virus-infected cells<sup>[8, 11]</sup>. Forest therapy employs a structured version of forest bathing using a trained guide and focuses on a reciprocal relationship between the forest and the individual<sup>[12]</sup>.

The American Horticultural Therapy Association (AHTA) defines healing gardens as: “plant-dominated environments including green plants, flowers, water, and other aspects of nature. They are generally associated with hospitals and other healthcare settings, designated as healing gardens by the facility, accessible to all, and designed to have beneficial effects on most users. A healing garden is designed as a retreat and a place of respite for clients, visitors, and staff and to

be used at their desire”<sup>[13]</sup>. Roger Ulrich uses the term “healing gardens” to refer to a garden with a diversity of elements that share the ability to reduce stress and positively impact patients, caregivers/staff, and visitors. To be considered a garden, Ulrich notes that the space should be full of features of real nature such as green plants, flowers, and water. To be considered healing, it should have therapeutic benefits for most of its users and certainly the most vulnerable<sup>[14]</sup>. Healing garden expert Clare Cooper Marcus emphasizes the importance of a multi-sensory experience in the healing garden. She states that the more the garden engages the visitor through all the senses, the lower the rate of pain and the perception of it. To do this, the garden should include colorful flowers, varying shades and textures of green plants, fragrance, wildlife, the view and sound of water, and features that move with even a slight breeze. A ratio of plants to hardscape of 7 : 3 is ideal<sup>[15]</sup>. Marcus points to evidence that increased social support from friends and family can lead to better patient healing<sup>[14]</sup>. Thus, providing semi-private areas for conversation in the hospital garden is essential, as are opportunities for pathway choices. The loss of control is a major issue when one enters a healthcare setting and also as one ages. The more a person is able to exercise control, the less he or she will experience stress, so a garden that offers a variety of choices is one that will help to reduce stress. Choice can be provided by incorporating various pathways, seating areas, destinations, plantings, and options for sun and shade among other features<sup>[16]</sup>.

In short, a healing garden is an environment that provides stress reducing, healing experiences at many levels and in many forms. As stated earlier, the term “healing” is not a definitive term, however, and could refer to physical rehabilitation, cognitive improvement, or emotional restoration, among many other things. Thus, healing garden sub-categories allow for the further defining of the type of healing, type of user, and type of outcome.



A healing garden designed for a children's hospital should be significantly different than a healing garden designed for adults with Alzheimer's disease as should the benefits and outcomes.

### 3 Classification of Healing Gardens

It can be argued that there are many more types of healing gardens than those included in this paper. For the purposes of this paper, that is to introduce a hierarchical framework that attempts to classify and define healing garden types, only those that have multiple current examples have been included. It is expected that additional garden types will be added to the framework in the future. Under the healing garden category of the landscapes for health framework are two major garden categories: the restorative garden and the enabling garden. Each of these has several sub gardens that further sub-divide these major garden categories.

#### 3.1 Restorative Garden

The defining elements of restorative garden category are shaped by research and theory developed by pioneers in the environmental psychology field and include the theory of supportive garden design and attention restoration theory (ART). In Ulrich's theory of supportive garden design, he posits that a garden's effectiveness comes largely from how effective it is in enhancing coping and decreasing stress<sup>[14]</sup>. He points to four resources that must be present to facilitate restoration: 1) perceived and actual control that provides access to privacy and temporary escape from stressors; 2) social support for visitors and staff as well as patients; 3) opportunities for movement and exercise; and 4) natural distractions such as plants, water, and wildlife<sup>[4]</sup>. His theory further suggests that one must feel a sense of security in the garden for the four resources to be effective. When all these things are present, the garden provides restoration and refuge from stress, enabling better coping, which then leads to improved health outcomes<sup>[17]</sup>.

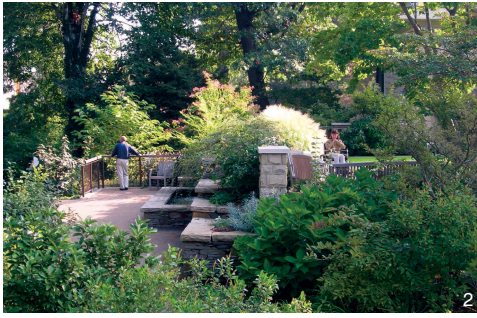
In Kaplan's theory of attention restoration, based on their research in environmental psychology, Stephen Kaplan and Rachel Kaplan have developed the attention restoration theory, which identifies the types of experiences that help restore the mental fatigue that results from directed attention. The Kaplan's state in their theory that environments dominated by nature tend to be particularly effective for restorative experiences<sup>[18]</sup>. Four components of a landscape or garden essential in fulfilling the goal of being restorative have been identified. 1) The first is being away, which refers to escaping from one's stressors, temporarily at least, and could involve physical escape from the stressful environment, psychological escape, and better yet, both. 2) Extent concerns the qualities of the place one has escaped to; it must provide a sense of truly being away in that it is coherent and rich enough to feel like an actual environment, not just a new stream of fascinating information (like data from a screen). As the Kaplan's assert, it should feel like "a whole other world ... It must provide enough to see, experience, and think about so that it takes up a substantial portion of the available room in one's head"<sup>[3]</sup>. 3) The third component, fascination, refers to gentle stimuli in the landscape or garden — things that are interesting and which capture but are not demanding of your attention. A classic example is a butterfly in the garden floating from flower to flower. One can focus fully on the butterfly without feeling any demand on mental strength. 4) Compatibility refers to whether the garden supports the activities that will be restorative for users<sup>[18]</sup>. Are there butterflies to watch, pleasing sounds to listen to, and engaging sights to view in the garden? Is there a pleasant place to walk or sit so that one can enjoy, comfortably, all that the garden has to offer? Can the visitor engage in these activities easily and without struggle? These are all aspects of a compatible environment.

Ulrich's and Kaplan's components of

restorative nature and design are relevant to any type of healing garden. But these restorative elements emphasize cognitive, emotional and/or psychological restoration, not physical rehabilitation. For many, improved mental strength will be followed by improved physical function as well but the restoration of mental capacity is primary. Two typical cases cleverly combine elements of restorative features to create a spatial environment that balances viewing and healing, which has a positive impact on the user's physical and mental well-being.

A great example of a restorative garden is the Elizabeth and Nona Evans Restorative Garden (Fig. 2) within the Cleveland Botanical Garden designed by Dirtworks, PC<sup>[19]</sup>. Despite the fact that the garden is next to a busy dining terrace and the main view of the garden's library, the enclosing plantings and stone wall provide a quiet space that reinforce the sense of being away from the surrounding areas. Water gently falls into a shallow pool and muffles nearby traffic noises, while fragrant, richly textured plants provide a source for fascination. Walkways lead to even more private seating areas and an overlook, and moveable furniture allows visitors to sit where they'd like for private conversation or open views.

A different type of restorative garden is the Alnarp Rehabilitation Garden in southwestern Sweden. The users of this garden have been referred by their doctors, insurance companies, or employers because they can no longer work as a result of depression or burn out. The garden is just under 5 acres and is divided into a number of garden rooms. Clients can relax in the quiet, hedge-enclosed welcome garden or they can do light gardening tasks in the greenhouse, vegetable garden, or orchard. They can walk along a forest path or relax in a large meadow. The design of this garden intentionally created a variety of outdoor rooms so there is a space to accommodate most everyone's needs and level of mental strength — easily fulfilling the compatibility aspect of a



2 Elizabeth and Nona Evans Restorative Garden at the Cleveland Botanical Garden



3 One of the 12 rooms of the 12 Step Garden at Scripps McDonald in California

restorative garden but in a very different way than the previous example<sup>[20]</sup>.

### 3.1.1 Meditation Garden

A sub-category of the restoration garden is the meditation garden. This garden type incorporates the components of the restorative setting but also includes design elements that serve as catalysts in an individual's personal quest toward emotional or physical healing. The verb "meditate" is defined as thinking or reflecting, especially in a calm and deliberate manner. Meditation can be further defined as looking inward and working toward the goal of inner peace and healing. This could take physical form as a series of small and semi-private garden rooms or enclosures within the space that facilitate quiet and peaceful reflection.

The 12 Step Garden (Fig. 3) at Scripps McDonald in California, design by the Schmidt Design Group/Scott Hazard but no longer in existence, was a beautiful example of a meditation garden. The garden was designed with rich, earthy materials and lush plantings that enclosed distinct spaces for meditation and reflection representing each step in the 12-step recovery process. The series of spaces created unique opportunities to sit alone or in small groups and the sequential or progressive experience of the design aided in the process of healing and recovery<sup>[21]</sup>.

A labyrinth garden is a sub-type of a meditation garden. Different from a maze garden, which is designed as a puzzle requiring directed

attention and decision making, a labyrinth garden facilitates a meditative and sometimes spiritual walk that is usually done alone. Walking the labyrinth can represent a quiet journey to the center of oneself and then back out to the world again<sup>[22]</sup>. It provides the opportunity to think through issues while moving through a garden space without having to think about where one is going. From a design standpoint, the labyrinth garden combines the symbolism of the circle (wholeness) and the spiral (the natural world and change) into one path with changes in direction but no decision points. The materials used can vary greatly but should be simple rather than complex so as to facilitate deep thought rather than causing distraction. Usually there is a single plant type used as the border between paths and a natural material such as stone, gravel, or durable ground cover used for the path.

Eloise Page Memorial Labyrinth. This garden is a seven-circuit classical style labyrinth within the Kanapaha Botanical Garden in Gainesville, Florida. The simple design of white gravel paths bordered by mondo grass (*Ophiopogon japonicus*) provides good visual contrast so that one can walk without having to watch every step and instead stay focused on one's thoughts. The lush grasses move in the breeze and catch sunlight at different angles, emphasizing the sensory components of the simple yet effective design. The labyrinth is set in a slight depression and mostly surrounded by trees, contributing to its restorative value. But, as is the

purpose of a labyrinth garden, the best restoration experience comes from quiet movement along the path.

### 3.1.2 Contemplation Garden

According to the dictionary definition, "contemplation" is a concentration on spiritual things as a form of private devotion. The contemplation garden may be similar to a meditation garden, but there tends to be a more spiritual, perhaps religious, component to a contemplation garden. While that might not necessitate major change in the design of the garden, it does suggest the inclusion of specific symbolic or representative objects in the garden to serve as catalysts for thought. Just as meditation can be thought of as looking inward and working toward the goal of inner peace and healing, contemplation is often defined as looking beyond and examining issues that are larger than oneself. This distinction could suggest the framing or opening-up of long views in the garden to help facilitate extrospection.

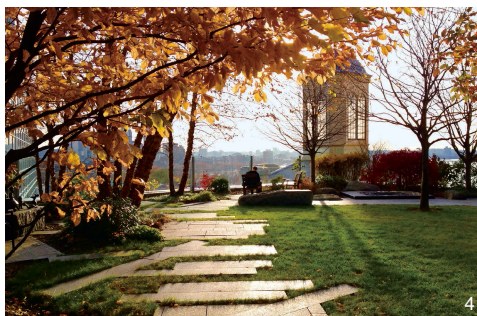
A beautiful example of a contemplation garden is the Howard Ulfelder Healing Garden (Fig. 4) at Massachusetts General Hospital in Boston designed by Halvorson Design<sup>[23]</sup>. The garden is expansive in terms of its view given its location on an eighth-floor rooftop, but it also has an intimate feeling because, at 6,500 sf, the garden itself is not very large. The garden is designed as a place of respite and includes beautiful teak seating, abundant plants, sculpture, and a water feature, not to mention stunning views of the city skyline and the Charles River. The glass parapet ensures that nothing blocks the sweeping views and features facilitate the contemplation of things beyond and greater than oneself. From a design standpoint, both meditation and contemplation gardens should include the components of a restorative garden as well as some specific catalysts for thought such as specimen plants, objects, or views adjacent to comfortable seating in a quiet place. These catalysts would distinguish these types of gardens.

### 3.1.3 Sanctuary/Refuge Garden

Another sub-type of a restoration garden is the sanctuary/refuge garden. The word “sanctuary” is defined as a consecrated place or a place of refuge and protection. Focusing on the well-being aspect of this definition — refuge and protection — gives some direction on the physical design of the space. Refuge is defined as a place that provides shelter or protection, and something to which one has recourse in difficulty. The second part of that definition speaks to the role of the garden; the “something” to which one has recourse in difficulty is the garden space. While the components of a restorative space continue to be essential in a sanctuary/refuge garden (being away, extent, fascination, compatibility), this type of garden calls for more specific design elements through the inclusion of shelter and protection.

In the same way the design of a meditation garden should include some symbolic physical elements, the design of the sanctuary/refuge garden should involve manipulation of spatial planes — overhead and vertical — to physically create the sense of shelter or protection, which then facilitates the opportunity for restoration in that context. As stated earlier, the fact that this garden type suggests some specific design elements in no way means there are few options for implementing that design — there are myriad ways to create refuge and shelter in a garden through creative planting design, careful inclusion of built features, and thoughtful focal points.

The Gift of Life Family House Garden designed by Design for Generations<sup>[24]</sup> is an example of a small sanctuary/refuge garden that serves transplant patients and their families. Located at the Family House, which provides temporary, affordable housing to those who travel to the city for transplant-related care, the garden is enclosed by brick walls and lush plantings that provide refuge from the surrounding city and the health-related stressors. A water fountain provides further noise buffering and a focal point. The



4 View toward the Charles River from the rooftop Howard Ulfelder Healing Garden at Massachusetts General Hospital

garden has proven to be a place of respite for all who visit the Family House.

A post-traumatic stress disorder (PTSD) garden can be considered a sub-type of a sanctuary/refuge garden. This type of garden is intended to provide restorative experiences to someone who has experienced great emotional trauma. Although PTSD is often associated with military service, it can be related to many other non-combat experiences. One of the basic tenants of PTSD treatment is the creation of a safe environment where an individual feels sheltered from possible harm. Trauma specialists assert that an individual's sense of safety takes precedent over all other factors before therapy can begin<sup>[25]</sup>. Feeling protected makes it easier to feel relaxed and secure enough to take manageable risks toward self-understanding and healing. What better environment than a carefully designed healing garden to provide a sense of safety, security, and refuge? A sense of safe enclosure is a high priority in the design of a successful PTSD garden; it is critical that the garden feels safe, has clear views, and contains no hidden corners. Walled or enclosed courtyard gardens are the best sites as they imply shelter and protection. The garden as a place of refuge and peace is foundational in this garden type, but including opportunities for active participation and teamwork is important. This component helps those with PTSD slowly reintegrate with others, starting with those of



5 Combat Stress Therapeutic Garden located at the headquarters of Combat Stress in Surrey

similar interests and experiences.

Combat Stress Therapeutic Garden (Fig. 5) is located in Leatherhead, Surrey, at the headquarters of Combat Stress, a charity devoted to helping ex-servicemen and women with mental health issues. It was designed by Fi Boyle in partnership with Independent Gardening, Ltd. The garden is designed to sooth those with PTSD and their families as well as provide opportunities for active participation in caring for the garden. The design includes long site lines and benches with high backs so that users feel a sense of refuge in that nobody can sneak up on them. Plantings are mostly low with some specimen plants providing structure without obscuring sight lines. The garden includes both small areas for private thoughts and conversations as well as larger areas for group work or meetings.

### 3.1.4 Sensory Garden

The last type of restorative garden covered here is a sensory garden and as it sounds, it is a garden that is designed to stimulate one's senses. Any well-designed garden should stimulate the senses, but a true sensory garden should place special emphasis on plants, objects, and spatial arrangements that provide various sensory opportunities and experiences throughout the year. Those sensory experiences should be planned and reproducible, not just occasional. Well-designed sensory gardens can be simultaneously stimulating and relaxing.





6 The Lerner Garden for the Five Senses at the Coastal Maine Botanical Gardens



7 Buehler Enabling Garden at the Chicago Botanic Garden

A good example of a sensory garden is the Lerner Garden for the Five Senses (Fig. 6) at the Coastal Maine Botanical Gardens, designed by Herb Schaal. The garden has various sections designed to bring out each sense through plantings, sculpture, seating, water features, and other hardscape elements. The garden spaces blend with each other as you move through them, as senses often do, and are thoughtfully sited as evidenced by the sight garden occupying the highest ground. Located adjacent to the main entrance of the larger garden, one of the intentions of the sensory garden is to sharpen your senses so that you better appreciate the rest of the botanic gardens during your visit. Throughout the sensory garden you are invited to smell, touch, hear, notice, and taste in many creative ways. To reiterate, the restoration experience is aimed primarily at the restoration of one's mental capacity. Therefore, the restorative garden and all the garden sub-types discussed so far are designed for a passive experience, designed to heal or restore your mental strength more so than your physical function. One might walk the garden, sit and relax, and socialize in the garden but not go there for hands-on, active experiences.

## 3.2 Enabling Garden

Enabling garden is another major garden types that falls under the healing gardens category that would be more fittingly described as the active track. This second group of gardens runs parallel to the restorative track and focused on assisting and

improving the physical function of the user. As users regain physical function there often follows improvement in mental and emotional strength, just as the reverse often happens in the restorative garden. But the primary focus of the enabling garden track is the more active aspects of the healing garden experience.

As just stated, the active counterpart to the restorative garden is the enabling garden. The definition of "enable" is to provide with the means or opportunity, or to make possible, practical, or easy. The enabling garden strives to make activities and experiences in the garden accessible for every user. No matter the user's disability or circumstance the enabling garden aims to eliminate, or at least ease, that challenge. The use of raised beds, for example, brings plants up to a height where those using wheelchairs, walkers, or who cannot get low to the ground can interact with them. Square-foot gardening frames and bright colors can help those with low vision to locate and enjoy plantings better, and ergonomic tools and design features like hanging basket pulley systems can assist those with arthritis or a weak grip. The focus of the enabling garden as a garden type is accessible design, with gardening as its primary goal, rather than restoration of mental strength. Once the physical and psychological barriers to an active experience in the garden are removed, then the garden can provide all types of healing experiences, including restoration of mental

capacity.

### 3.2.1 Demonstration Garden

There are at least three subcategories of the enabling garden, the first being a demonstration garden. Demonstration gardens often provide some therapeutic programming on site. Given that they are often located in a larger botanic garden, however, the greatest impact they have is by educating visitors on enabling elements and horticultural therapy programming. For the general public, understanding the accessibility issues in a garden is usually the first step in grasping the intent of a healing garden.

The Buehler Enabling Garden (Fig. 7) at the Chicago Botanic Garden, designed by Missy Marshall, is an excellent example of a demonstration garden. While it does run some therapeutic horticulture programming, its primary purpose is to educate visitors on how to make gardening accessible. There are many creative examples of accessible planting beds, water features, vertical gardening structures, and tools. The materials, layout, and design details illustrate that accessible features can be beautiful and fit seamlessly into the overall garden design.

### 3.2.2 Eldercare Garden

The next subcategory of an enabling garden is the eldercare garden; these are gardens designed for nursing homes, assisted care facilities, adult day care, and any other facilities that specialize in the care of older adults. These types of gardens must be accessible, whether for facilitating the act of gardening, moving through the garden, or even just comfortably sitting in the garden. Physical accessibility is essential for a garden geared toward older adults, but psycho-accessibility is also crucial. Does the older adult user feel comfortable and secure in the garden? Are there overhead structures or plantings that extend the indoor/outdoor threshold and soften the transition of light and temperature? Are there opportunities for sitting close to the building while still feeling part of the garden for those not ready to venture too far? As

those older adults become more comfortable going further into the garden, are there new views and seating throughout to support and encourage this incremental exploration? Railings strategically located throughout the garden help users move through the garden as well as pause comfortably at garden features. Shade is crucial as well; shade is important in any garden but especially in an eldercare garden.

An active eldercare garden is a subcategory of an eldercare garden that is designed with more activity and movement in mind. This type of garden might be found at a facility where many users function at a relatively high physical level. It could include opportunities for active gardening in various raised beds, areas for exercise, and pathway choices that provide different options for longer walks. Areas for outdoor games such as shuffleboard or a putting green extend the opportunities for social and physical activity in the garden.

### 3.2.3 Dementia/Memory Garden

This type of garden includes some very specific design elements to provide safety and positive outdoor experiences for those suffering from dementia. For example, the design should include a single entry and exit point, if possible, and some easily identifiable reference points to help the users navigate the garden<sup>[26]</sup>. The routing of the path should serve as a guide through the garden, not requiring users to make any decisions about which way to go. It is best to avoid changing ground surface colors as this can be perceived as a change in elevation by an individual with dementia. And because wandering is a primary concern with this group, the dementia/memory garden should include a security barrier that is not visually intrusive to keep users safe but not captive<sup>[26]</sup>. The Sophia Louise Durbridge-Wege Living Garden (Fig. 8), designed by Martha Tyson, is a wonderful example of a dementia/memory garden. Designed for individuals with Alzheimer's disease and dementia, there is just one entry door to the garden



8 Sophia Louise Durbridge-Wege Living Garden at the Family Life Center

and a simple looped pathway that encourages walking. Confusion or aggression is avoided because users do not have to make decisions about turning left or right or remember to which door to return. There is a waterfall that provides soothing sights and sound, but its placement negates the possibility of users climbing into it. Lots of perennials that were popular when many of the users were young provide opportunities for memory recall led by the staff. Horticultural therapy activities take place in a small garden and orchard area.

In Australia, the Banora Point Dementia Garden<sup>[27]</sup> provides cognitive and sensory stimulation through the inclusion of destination points such as clothes lines and folding benches as well as chicken coops and raised vegetable garden beds. These active destinations have been carefully thought out to enable the residents, allowing them to engage in meaningful experiences with staff and family that are familiar and enjoyable. A pilot project revealed overwhelming improved health outcomes for residents using the garden with a 21% reduction in scores of Cornell Scale for Depression in Dementia and a 30% reduction in unresolved behavior such as verbal and physical aggression.

### 3.2.4 Therapeutic Garden

The third subcategory of enabling gardens is a therapeutic garden. The focus of a therapeutic garden is a therapeutic intervention of some type.



9 The Outpatient Therapy Garden at the Kennedy Krieger Institute

“Therapeutic” is defined as relating to the treatment of disease or disorders by remedial agents or methods. Therefore, the therapeutic garden should support the prescribed treatment for the patient or client, and in doing so help the facility with which it is associated meet its goals. Because of that it should be designed to produce a measurable outcome, just as a medication taken for a particular illness is expected to produce a desired effect. A therapeutic garden is often designed for use as a component of a treatment program such as occupational therapy, physical therapy, or horticultural therapy programs, and may exist on its own as an extension of an indoor therapeutic program area or it may be part of a larger healing garden.

A physical therapy garden, a sub-type of a therapeutic garden, would be designed to support physical rehabilitation and to provide an environment where goals could be set and measured consistently. A great example of a physical therapy garden is the Kennedy Krieger Outpatient Therapy Garden (Fig. 9), designed by Mahan Rykiel Associates, that serves children and adolescents with disorders of the brain, spinal cord, and musculoskeletal system. The garden is designed to complement the work of the therapy staff and is made up of a series of outdoor rooms that provide settings for physical and cognitive therapy. The designers incorporated a variety of spatial scales, paving patterns, textures, and



10 The therapeutic rooftop garden at Schwab Rehabilitation Hospital

elevation changes, linking them all with a series of water elements to appeal to the children using the garden.

A horticultural therapy/therapeutic horticulture garden is another type of therapeutic garden that is designed to use plants and plant-based activities as a therapeutic intervention in supporting both the goals of the facility as well the individual's treatment plan. The horticultural therapy/therapeutic horticulture garden is managed by a trained horticultural therapist. Some gardens are completely barrier free so that nothing gets in the way of the people-plant experience. Others may combine elements of both horticultural therapy and rehabilitation and include various types of raised beds, walking surfaces, changes in elevation, and other details that aid in therapeutic intervention. The therapeutic rooftop garden (Fig. 10) at Schwab Rehabilitation Hospital, designed by Douglas Hills Associates, offers several therapeutic and rehabilitative programs designed to maximize the healing benefits of plant-based horticultural therapy activities. Using a co-treatment approach, therapists incorporate many methods of treatment into therapy sessions including motor coordination, relaxation, leisure skills training, and sensory stimulation as well physical, occupational, speech, psychological, recreational, and social goals.

## 4 Conclusion

This paper serves as a summary of a hierarchical framework classification of healing

garden types. While general guidelines and concepts are provided for the design and function of each garden type, it is important to recognize that none are absolute; not only is there bound to be overlap in garden types but gardens may also have multiple functions. The purpose of this hierarchical framework is for understanding the distinctions and relationships between healing garden types. In addition, this framework is by no means complete; there are additional garden types that could be inserted into the framework and others that could shift position based on the primary function of the specific garden. But the basic structure of dual tracks of primarily passive (restorative) or primarily active (enabling) gardens — remains constant.

A healing garden framework, such as the one presented here, is critical so professionals can clearly and confidently distinguish and describe healing garden types. In doing so, they avoid vague descriptions that dilute efforts to educate and persuade stakeholders to embrace and support the development of healing gardens. Defining healing environments with clear language also makes it much easier to plan, design, and implement these gardens, and just as importantly, compare and evaluate healing garden settings as well as the activities and outcomes they support.

### Acknowledgments:

The author gratefully acknowledges the ongoing support and collaborative efforts of Dr. Xue Binxia.

### Sources of Figures and Table:

Fig. 1 is drawn by the author. Fig. 2 is provided by Dirtworks, PC. Fig. 3 is taken by Scott Hazard. Fig. 4 is taken by the author. Fig. 5 is provided by Fi Boyle. Fig. 6 is taken by Jack Carman. Fig. 7 is taken by the author. Fig. 8 is taken by Martha Tyson. Fig. 9 is provided by Mahan Rykiel Associates Inc. Fig. 10 is provided by Douglas Hills Associates Inc. Tab. 1 is drawn by the author based on references [4], [5].

(Editor / BIAN Zilin)

### Author:

(USA) Elizabeth R. M. Diehl, Master, HTM, is a lecturer in the School of Environmental Horticulture, University of Florida. Her research focuses on horticultural therapy, healing gardens, and therapeutic horticulture program.

### Translators:

JIANG Bo is a Ph.D. candidate in the School of Architecture and Design, Harbin Institute of Technology, and a member of the Key Laboratory of Cold Region Urban and Rural Human Settlement Environment Science and Technology, Ministry of Industry and Information Technology. Her research focuses on nature-based intervention and rehabilitation landscape, and design of healthy human settlement environment.

CHENG Yu is a master student in the School of Architecture and Design, Harbin Institute of Technology, and a member of the Key Laboratory of Cold Region Urban and Rural Human Settlement Environment Science and Technology, Ministry of Industry and Information Technology. Her research focuses on healing landscape.