

Source	Quote	Additional info.	pg. (s)
<p><a href="https://www.tandfonline.com/doi/full/10.1080/09613218.2021.2006594">https://www.tandfonline.com/doi/full/10.1080/09613218.2021.2006594</a></p> <p>(Richardson and Butler, 2021)</p> <p>Richardson, M., and Butler, C. W. (2021) Nature connectedness and biophilic design. <i>Building Research &amp; Information</i> 1–7.  <a href="https://doi.org/10.1080/09613218.2021.2006594">https://doi.org/10.1080/09613218.2021.2006594</a></p>	<p>“Innate tendency to affiliate with other living organisms”</p> <p>“There is growing evidence that nurturing positive connections with nature benefits people’s well-being (Capaldi et al., 2014)”</p> <p>“Increasing disconnect between humans and the rest of the natural world”</p> <p>“biophilic design is the application of the concept of biophilia to the design of landscapes and the built environment”</p> <p>“Greater nature connectedness delivers better mental health (Capaldi et al., 2014)”</p>	<p>Talks about biophilic design and ‘nature connectedness’</p>	<p>2 2 2 2 2</p>
<p><a href="https://www.tandfonline.com/doi/full/10.1080/09613218.2021.1984867">https://www.tandfonline.com/doi/full/10.1080/09613218.2021.1984867</a></p> <p>(Engelen <i>et al.</i>, 2021)</p> <p>Engelen, L., Rahmann, M., and de Jong, E. (2021) Design for healthy ageing – the relationship between design, well-being, and quality of life: a review. <i>Building Research &amp; Information</i> 1–17.  <a href="https://doi.org/10.1080/09613218.2021.1984867">https://doi.org/10.1080/09613218.2021.1984867</a></p>		<p>QOL Wellbeing Links to design</p> <p>could argue links more to biophilic design in one part of the lit review</p>	
<p><a href="https://b-ok.cc/book/11835177/c">https://b-ok.cc/book/11835177/c</a></p>	<p>“This innate biological connection between people and nature is referred to as ‘biophilia’”</p>	<p>Define biophilic</p>	

<p><a href="#">c3d68</a> Or <a href="https://books.google.co.uk/books?hl=en&amp;lr=&amp;id=7QcCEAAAQB_AJ&amp;oi=fnd&amp;pg=PT6&amp;dq=biophilic+design+in+kitchens&amp;ots=cU8JShLbKm&amp;sig=zEmAQEXAfc6F_UIEmDW-w6l2ZL8&amp;redir_esc=y#v=onepage&amp;q&amp;f=false">https://books.google.co.uk/books?hl=en&amp;lr=&amp;id=7QcCEAAAQB_AJ&amp;oi=fnd&amp;pg=PT6&amp;dq=biophilic+design+in+kitchens&amp;ots=cU8JShLbKm&amp;sig=zEmAQEXAfc6F_UIEmDW-w6l2ZL8&amp;redir_esc=y#v=onepage&amp;q&amp;f=false</a></p> <p>(Browning <i>et al.</i>, 2020)</p> <p>Browning, W. D., Ryan, C. O., and Heatherwick, T. (2020) <i>Nature inside. A biophilic design guide.</i>. London: Riba Publishing</p>	<p>“Nature in the Space patterns (Figures 0.2.1–7) are direct experiences of nature within the built environment. Some examples of these include a view out of a window, a terrarium, the smell of potted herbs, a breeze through a room, a cool slab of marble, an aquarium, and the dappled light coming through moving leaves.</p> <p>Natural Analogues (Figures 0.2.8–10) are indirect or representational experiences of nature in the built environment. Some examples of these could include floral patterns on pillows, the volute on a column, an abstracted moss as a carpet pattern, textured wood on a door handle, fossil– rich stone in a wall, and a fractal pattern in flooring.</p> <p>Nature of the Space patterns (Figures 0.2.11–15) are four–dimensional characteristics of common spatial experiences in nature. In the built environment, these could include a window at the end of a corridor, a high– backed booth in a restaurant, peekaboo cut–outs in a partition, the meeting room cantilevered into the atrium and the transition from a low entry into a high–ceilinged lobby.”</p>	<p>design and the principles</p>	
<p><a href="https://www.proquest.com/docview/1644455250/DF673BD66A7F4AB4PQ/2?accountid=27803">https://www.proquest.com/docview/1644455250/DF673BD66A7F4AB4PQ/2?accountid=27803</a></p> <p>(Gray and Birrell, 2014)</p> <p>Gray, T., and Birrell, C. (2014) Are Biophilic-Designed Site Office Buildings Linked to Health Benefits and High Performing Occupants? <i>International Journal of Environmental Research and Public Health</i> 11, (12) 12204–12222. <a href="https://doi.org/10.3390/ijerph111212204">https://doi.org/10.3390/ijerph111212204</a></p>			
<p><a href="https://sdgs.un.org/goals">https://sdgs.un.org/goals</a></p>	<p>“Ensure healthy lives and promote well-being for all at all ages”</p>	<p>Goal 3</p>	

<p>(United Nations, 2021)</p> <p>United Nations (/2021) The 17 Goals. <i>United Nations</i>. United Nations Available at: <a href="https://sdgs.un.org/goals">https://sdgs.un.org/goals</a>.</p>	<p>“The pandemic has halted or reversed progress in health and shortened life expectancy”</p> <p>“90% of countries are still reporting one or more disruptions to essential health services”</p>		
<p><a href="https://static1.squarespace.com/static/5a8a259590bccee5b2320821/t/5a92240de2c483bcb2835e55/1519526935143/PBD+2017+6MB.pdf">https://static1.squarespace.com/static/5a8a259590bccee5b2320821/t/5a92240de2c483bcb2835e55/1519526935143/PBD+2017+6MB.pdf</a></p> <p>(Kellert, S. and Calabrese, 2015)</p> <p>Kellert, S., and Calabrese, E. (2015) <i>The Practice of Biophilic Design</i>.</p>	<p>“Biophilic design seeks to create a good habitat for people as a biological organism in the modern built environment that advances people’s health, fitness and wellbeing.”</p> <p>“ The successful application of biophilic design includes adhering to basic principles such as;</p> <ul style="list-style-type: none"> <li>- “Biophilic design encourages an emotional attachment to particular settings and places”</li> <li>- “. Biophilic design promotes positive interactions between people and nature that encourage an expanded sense of relationship and responsibility for the human and natural communities.”</li> </ul> <p>Positive effects of biophilia:</p> <p>“Physical outcomes include enhanced physical fitness, lower blood pressure, increased comfort and satisfaction, fewer illness symptoms, and improved health.”</p> <p>“Mental benefits range from increased satisfaction and motivation, less stress and anxiety, to improved problem solving and creativity. Positive behavioral change includes better coping and mastery skills, enhanced attention and concentration, improved social interaction, and less hostility and aggression.”</p>		<p>Pp. 6</p>
<p><a href="https://ultimatehomedesign.com/oph/uhd04gb02.pdf">https://ultimatehomedesign.com/oph/uhd04gb02.pdf</a></p> <p>(Stewart-Pollack, 2006)</p> <p>Stewart-Pollack, J. (2006) <i>Biophilic Design: For The First Optimum Performance</i></p>	<p>Sensory connections to nature:</p> <p>“While most built environments provide somewhat shallow and limited sensory experiences as compared to nature, biophilic design deeply engages all of the senses—in much the same way as sitting near the ocean, walking through the forest, climbing a mountain, or working in the garden. It is not a passive experience, but rather one that reminds us every moment that we are alive and a part of the life of the planet.”</p>	<ul style="list-style-type: none"> <li>- Use this to discuss how biophilic design contributes to enhancing a consumer's</li> </ul>	<p>Pp. 39</p>

<p>Home. <i>Green Build</i> (04)</p>		<p>interaction with the kitchen space. Can say how it engages our sensors (make mention of the examples in the source, sitting near the ocean etc)</p> <ul style="list-style-type: none"> <li>- Can also link this to how it benefits an individual's wellbeing</li> </ul>	
<p><a href="https://archistudent.net/biophilia-in-architecture-bringing-buildings-to-life/">https://archistudent.net/biophilia-in-architecture-bringing-buildings-to-life/</a></p> <p>(Saini, 2019)</p> <p>Saini, P. (09/05/2019)          Bringing buildings to life: Biophilia in Architecture – Archistudent. <i>Archistudent</i>. Available at: <a href="https://archistudent.net/biophi">https://archistudent.net/biophi</a></p>		<p>Not a journal article but it illustrates the 14 patterns of biophilic design and provides some statistics which may support other journal article points or theories.</p>	

<p>lia-in-architecture-bringing-buildings-to-life/. [Accessed December 23, 2021]</p>			
<p><a href="http://ndl.ethernet.edu.et/bitstream/123456789/41518/1/95.pdf#page=279">http://ndl.ethernet.edu.et/bitstream/123456789/41518/1/95.pdf#page=279</a></p> <p>(Heerwagen <i>et al.</i>, 2008)</p> <p>Heerwagen, J. H., Kellert, S. R., and Mador, M. L. (2008) <i>Biophilic design : the theory, science, and practice of bringing buildings to life.</i> Hoboken, Nj: Wiley</p>	<p>“Especially where actual views to nature are not feasible, natural building materials (wood grain, patterned stone, etc.) and artwork of nature scenes can be used to elicit biophilic response.”</p> <p>“As is demonstrated in many of Frank Lloyd Wright’s buildings, varying ceiling height can create spaces that mimic the outdoors (open, daylit spaces) and areas of refuge to provide a sense of security of containment (more constrained spaces with lower ceilings).”</p>		325
<p><a href="https://www.mdpi.com/2075-5309/5/3/948/htm">https://www.mdpi.com/2075-5309/5/3/948/htm</a></p> <p>(Gillis and Gatersleben, 2015)</p> <p>Gillis, K., and Gatersleben, B. (2015) A Review of Psychological Literature on the Health and Wellbeing Benefits of Biophilic Design. <i>Buildings</i> 5, (3) 948–963. <a href="https://doi.org/10.3390/buildings5030948">https://doi.org/10.3390/buildings5030948</a> [Accessed</p>	<p>Attention Restoration Theory (ART) and Stress Recovery Theory (SRT) to analyse psychological literature surrounding the impact biophilia has on a person’s perceptions, attitude and behaviour</p>	Health and wellbeing	

December 24, 2021]			
<p><a href="https://www.terrapinbrightgreen.com/reports/14-patterns/">https://www.terrapinbrightgreen.com/reports/14-patterns/</a> (Browning, W. <i>et al.</i>, 2014)</p> <p>Browning, W., Ryan, C., and Clancy, J. (12/09/2014) 14 Patterns of Biophilic Design. <i>Terrapinbrightgreen.com</i>. Available at: <a href="https://www.terrapinbrightgreen.com/reports/14-patterns/">https://www.terrapinbrightgreen.com/reports/14-patterns/</a>.</p>	<p>7 Biophilic Design principles, including thermal and airflow variability and non-visual connection with nature</p> <p>changes in air temperature and airflow</p> <p>whilst non-visual connection with nature focuses on auditory or haptic stimuli</p>		
<p><a href="https://www.sciencedirect.com/science/article/pii/S0959652621033540">https://www.sciencedirect.com/science/article/pii/S0959652621033540</a></p> <p>(Lei <i>et al.</i>, 2021)</p> <p>Lei, Q., Yuan, C., and Lau, S. S. Y. (2021) A quantitative study for indoor workplace biophilic design to improve health and productivity performance. <i>Journal of Cleaner Production</i> 324 129168. <a href="https://doi.org/10.1016/j.jclepro.2021.129168">https://doi.org/10.1016/j.jclepro.2021.129168</a> [Accessed December 3, 2021]</p>	<p>12% greenery to workspace ratio is the optimum figure to achieve the maximum psychological and physiological benefits</p>		

<p><a href="https://books.google.co.uk/books?hl=en&amp;lr=&amp;id=sfc2OFuE8oQC&amp;oi=fnd&amp;pg=PR11&amp;dq=are+triangles+the+strongest+shape+in+nature&amp;ots=6KzSE7TewC&amp;sig=Ky4POkAkUNj2aCsRtLe_2O1yluA&amp;redir_esc=y#v=onepage&amp;q=are%20triangles%20the%20strongest%20shape%20in%20nature&amp;f=false">https://books.google.co.uk/books?hl=en&amp;lr=&amp;id=sfc2OFuE8oQC&amp;oi=fnd&amp;pg=PR11&amp;dq=are+triangles+the+strongest+shape+in+nature&amp;ots=6KzSE7TewC&amp;sig=Ky4POkAkUNj2aCsRtLe_2O1yluA&amp;redir_esc=y#v=onepage&amp;q=are%20triangles%20the%20strongest%20shape%20in%20nature&amp;f=false</a></p> <p>(Pearce, 1990)</p> <p>Pearce, P. (1990) <i>Structure in nature is a strategy for design</i>. Cambridge U.A.: Mit Press</p>	<p>‘Triangles are the only polygon stable (rigid) by virtue of its geometry’</p>		
<p><a href="https://b-ok.cc/book/1000132/149698">https://b-ok.cc/book/1000132/149698</a></p> <p>(Baden-Powell, 2005)</p> <p>Baden-Powell, C. (2005) <i>Architect's Pocket Book of KITCHEN DESIGN</i>. Architectural Press</p>	<p>Working triangle image - screenshot is in documents</p>	<p>Links to the previous source</p> <p>Triangles are strongest shape found in nature could link to how they are used as a guide for creating a functional space</p>	
<p><a href="https://b-ok.cc/book/5335560/0e37a7">https://b-ok.cc/book/5335560/0e37a7</a></p> <p>(Pawlyn, 2016)</p>	<p>Biomimicry refers to the way functional challenges can be solved through emulating the solutions found in nature</p>		

<p>Pawlyn, M. (2016)</p> <p><i>Biomimicry in architecture.</i></p> <p>2nd Edn. Newcastle Upon Tyne: Riba Publishing</p>			
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