

## BÖLÜM 18

# Doğum yeri ve ortamının tasarımı

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### Giriş

Bu bölüm, genel olarak sağlık hizmetleri ve özel olarak doğum ortamı ile ilgili olarak mimari alan konusunu ele almaktadır. Bölümde, mimarlığın insan vücutunun biçim ve işlevi arasındaki etkileşimde anatomi ve fizyolojisi kadar önemli bir rol oynayabileceği gerçeği ışığında, yetkin klinisyenlerin oda veya bina nasıl görünürse görünsün mükemmel bakım sağlayabilecekleri varsayımları değerlendirilmektedir. Ortamın içinde yaşam, etkinlikler, deneyimler ve ilişkiler aynı anda farklı kullanıcılar için farklı ölçeklerde gerçekleşir – oda, hizmet birimi, tesis (bkz. Şekil 1). Mimari ortam tek değişken olmasa da yapılandırılmış çevre davranışları, etkileşimleri, hareketleri ve deneyimleri etkileyebilir (Lynch, 1960; Markus, 1993; Hamilton ve Watkins, 2008; Hillier, 2007; Hillier vd. 1993). Bu etkinin iyi düzeyde kanıtını özellikle sağlık yapılarında mevcuttur. Birçok çalışma, tasarlanan ortamın stres seviyelerini nasıl değiştirebileceğini ve bu nedenle insan sağlığını, kullanıcıların deneyimlerini ve personel tarafından sağlanan bakımın kalitesini potansiyel olarak nasıl etkileyebileceğini göstermiştir (Evans ve Cohen, 1998; Del Nord, 2006; Edelstein, 2004). ; de Botton, 2006; Ulrich ve Barach, 2006; Ulrich vd. 2008; Harte vd. 2016; Gesler vd. 2004).

Doğum tesisleri (doğum merkezleri, doğum üniteleri, doğum servisleri) genellikle tedavi altındaki “hastaların” bulunduğu hastane mülkünün bir parçası olan sağlık bakımı yapıları olarak kabul edilir. Ancak, bu durumda, hastane ortamlarıyla ilgili olağan varsayımlarla doğrudan uyumlu olmayan, belirli bir işlevi olan ‘sağlık’ alanlarından söz ettigimiz için bu sınıflandırma üzerinde düşünmek gereklidir. Bu alanların kullanıcıları, çoğu “hasta” olmayan kadınlar, bebekler, partnerler, ebeler ve doktorlardır. Aslında buralarda gerçekleştirilen ana faaliyet, başlı başına doğal bir olay olan doğumdur ve bu nedenle tam anlamıyla “sağlık hizmeti” olması gerekmek. Sağlıklı bir travay ve doğumu desteklemek için klinik müdahaleye ihtiyaç duyan annelerin

Bu alandaki mimari araştırmalar, esneklik, uyarlanabilirlik ve ayarlanabilirliğin yanı sıra doğum odasında mahrem bir alanın varlığına izin vermek için, malzeme, yapı elemanları ve cihazlar düzeyinde doğum ortamlarının ekolojisine ilişkin yeni bulguları da dikkate almalıdır. Ayrıca araştırmalar, mevcut tasarım araçlarına ek olarak optimal doğum odası ve ünite düzenini destekleyen uygun gereksinimleri ve standart önlemleri belirlemeye odaklanmalıdır.

### **Dikkate alınması gereken önemli noktalar**

- Yeni tesisler tasarlarken veya mevcut tesisleri yenilerken klinisyenlerin, son kullanıcıların (ailelerin) ve mimarların işbirliği yapmasını sağlayın.
- Aileler ve bakım ekibi arasında iletişim ve koordinasyonun desteklenmesi de dahil olmak üzere, tasarımın temel bakım süreçleri üzerindeki etkisini göz önünde bulundurun.
- Ortamın, farklı veya değişen ihtiyaçlara sahip doğuran kadınların farklı veya değişen yoğunluk ve hassasiyetlerine uygun esneklikte kullanılabileceği yolları düşünün.
- Doğum ortamının, annenin kendini rahat hissetmesi için gerekli mahremiyeti nasıl kolaylaştırdığını düşünün.

### **Kaynaklar**

- Aus HFG, 2017. Part B. Health Facility Briefing and Planning HPU 510 Maternity Unit; [Internet]. Available from: <https://www.healthfacilityguidelines.com.au/health-planning-units> [cited 2018, Oct 10].
- Al-Sayed, K., Turner, A., Hillier, B., Iida, S. and Penn, A. (2014) Space Syntax Methodology. 4th edition. London: Bartlett School of Architecture, UCL.
- Balabanoff Doreen. 2016. Light in the Reimagined Birth Environment PROCESS WORK. A document accompanying the doctoral dissertation submitted September 2, 2016 to University College Dublin. Available at: <https://indd.adobe.com/view/3a35bb36-7f43-4e94-b79f-7ce4b989f452>
- Berridge Emma-Jane, Nicola J.Mackintosh, Della S.Freeth, 2010. Supporting patient safety: Examining communication with in delivery suite teams through contrasting approaches to research observation. Midwifery 26(2010)512–519
- Bowden Calida, Athena Sheehan, Maralyn Foureur. 2016. Birth room images: What they tell us about childbirth. A discourse analysis of birth rooms in developed countries. Midwifery 35(2016)71–77
- Dalke Hilary, Jenny Little, Elga Niemann, Nilgun Camgoz, Guillaume Steadman, Sarah Hill, Laura Stott. 2006. Colour and lighting in hospital design. Volume 38, Issues 4–6, June–September 2006, Pages 343–365
- Del Nord R. (2006). Environmental stress prevention in children's hospital design. Technical guidelines and architectural suggestions. Milano: Motta Architettura
- De Botton A., 2006, The Architecture of Happiness: the Secret Art of Furnishing Your Life, Penguin, New York Department of Health, 2013. Health Building Note 09-02: Maternity care facilities; [Internet]. Available from: <https://www.gov.uk/government/publications/> [cited 2018, Oct 10].
- Edelstein E., 2004, Neuroscience and Architecture: Health Care Facilities, Erik Jonsson Center of the National Academy of Sciences, National Academy of Sciences, Woods Hole, Academy of Neuroscience for Architecture Edwards L. and P. Torcellini. 2002. A Literature Review of the Effects of Natural Light on Building Occupants. Technical Report of National Renewable Energy

- Laboratory. Available at <http://www.nrel.gov/docs/fy02osti/30769.pdf>
- Evans GW. 2003. The built environment and mental health. *J Urban Health*. 2003 Dec;80(4):536-55.
- Evans GM., McCoy JM, 1998, When buildings don't work: the role of architecture in human health, *Journal of Environmental Psychology* 18, 85-94
- FGI, 2018. Guidelines for Design and Construction of Hospitals; [Internet]. Available from: <http://www.madcad.com/store/subscription/FGI-Guidelines-Hospital-2018/> [cited 2018, Oct 10].
- Forbes, I, Homer, CSE, Foureur, M, Leap, N. Birthing Unit Design: Researching New Principles. *Design & Health Scientific Review* 1, 47–53. World Health Design, London; 2008
- Foureur, M. 2008. Creating birth space to enable undisturbed birth. In: Birth Territory and Midwifery Guardianship: Theory for Practice, Education and Research, 1e 1st Edition by Kathleen Fahy, Maralyn Foureur, Carolyn Hastie. Elsevier Books for Midwives. pp.57-77
- Foureur Maralyn, Deborah Davis, Jennifer Fenwick, Nicky Leap, Rick Iedema, BA, Ian Forbes, Caroline S.E. Homer. 2010a. The relationship between birth unit design and safe, satisfying birth: Developing a hypothetical model. *Midwifery* 26(2010)520–525
- Foureur MJ, Leap N, Davis D, Forbes I, Homer CSE. (2010b) Developing the Birth Unit Design Spatial Evaluation Tool (BUDSET): A qualitative study. *Health Environments Research and Design Journal*. 3(4): 43-57.
- Foureur MJ, Leap N, Davis D, Forbes I, Homer CSE. (2011) Testing the Birth Unit Design Spatial Evaluation Tool (BUDSET) in Australia: A Pilot Study. HERD Volume 4, Number 2, pp 36-60
- Freeman Lesa M., Vivienne Adair, Helen Timperley, Sandra H. West. 2006. The influence of the birthplace and models of care on midwifery practice for the management of women in labour. *Women and Birth* (2006) 19, 97
- Franck, R. and Lepori Bianca. 2007. Architecture from the Inside Out: From the Body, the Senses, the Site and the Community, 2nd Edition. Wiley
- Gesler W, Bell M, Curris S, Hubbard P, Francis S. Therapy by design: evaluating the UK hospital building program. *Health Place* 2004;10 :117– 28.
- Hamilton, D. K., Walkins, D.H., Evidence-Based Design for Multiple Building Types: Applied Research-Based Knowledge for Multiple Building Types, Ed. John Wiley & Sons, New York ,2008,
- Hammond A. D., Homer C. S. E. & Foureur M. (2014). Messages from space: An exploration of the relationship between hospital birth environments and midwifery practice. *Health Environments Research & Design Journal*, 7(4), 81– 95
- Haq, S. and LUO, Y. (2012) Space Syntax in health-care facilities research: a review. *Health Environments Research & Design*. 5(4), pp. 98–117.
- Harte, J. D., Sheehan, A., Stewart, S. C., & Foureur, M. (2016). Childbirth supporters' experiences in a built hospital birth environment: Exploring inhibiting and facilitating factors in negotiating the supporter role. *Health Environments Research & Design Journal*, 9(3), 135–161
- Hauck Y., Rivers C, Doherty K. 2008, Women's experiences of using a Snoezelen room during labour in Western Australia, *Midwifery* 24, 460-470
- Hillier, B., Penn, A., Hanson, J. and XU, J. (1993) Natural movement: or, configuration and attraction in urban pedestrian movement. *Environment and Planning B: Planning and Design*. 20, pp. 29–66.
- Hillier, B. (2007) Space Is the Machine. [Online] London: Space Syntax. Available from: <http://discovery.ucl.ac.uk/3881/1/SITM.pdf> [accessed 14 December 2015].
- Hillier, B. and Hanson, J. (1984) The Social Logic of Space. Cambridge: Cambridge University Press.
- Hillier, B. and Raford, N. (2010) Description and discovery in socio-spatial analysis: the case of Space Syntax. In Walford, G. et al. (eds) *The Sage Handbook of Measurement*. London: SAGE, pp. 265–281.
- Hodnett ED, Stremler R, Weston JA, McKeever P., 2009, Re-conceptualizing the hospital labor room: the PLACE (Pregnant and Laboring in an Ambient Clinical Environment) pilot trial. *Birth* 36(2), 159-166
- Hunt, S., & Symonds, A. (1995). The Social Meaning of Midwifery. New York: Palgrave MacMillan.
- Khan, N. (2012) Analyzing patient flow: reviewing literature to understand the contribution of space

- syntax to improve operational efficiency in healthcare settings. In Greene, M., Reyes, J. and Castro, A. (eds) Proceedings: Eighth International Space Syntax Symposium. 8183, pp. 1–11. Santiago de Chile: PUC.
- Iannuzzi, Laura (2016). An exploration of midwives' approaches to slow progress of labour in birth centres, using case study methodology. PhD thesis, University of Nottingham. Available on line at <http://eprints.nottingham.ac.uk/37758/1/Iannuzzi%20PhD%20Thesis%20DEFINITIVE.pdf>
- Ispel Guidelines, 2007. Linee guida per gli interventi di prevenzione relativi alla sicurezza e all'igiene del lavoro nel blocco parto. Istituto superiore per la prevenzione e la sicurezza del lavoro; [Internet]. Available from: <https://appsrcercascientifica.inail.it/> [cited 2018, Oct 10].
- Jenkinson, B., Josey, N., & Kruske, S. (2014). BirthSpace: An evidence-based guide to birth environment design. Queensland Centre for Mothers & Babies, The University of Queensland.
- Lepori B. 1994. Freedom of Movement in birth Places. Children's Environments 11(2): 1-12
- Lepori B., Fourer M., Hastie C. 2008. Mindbodyspirit architecture: Creating Birth Space. In: Birth Territory and Midwifery Guardianship: Theory for Practice, Education and Research, 1e 1st Edition by Kathleen Fahy, Maralyn Foureur, Carolyn Hastie. Elsevier Books for Midwives. pp.95-112
- Lynch, K. (1960) Image of a City. Cambridge, MA: MIT Press.
- Longo E., Setola N., "Towards a spatial dimension of social rights. New perspectives in architecture and law studies", Interdisciplinary Themes Journal, Vol.1/2009. pp. 100-111.
- Markus, T.A. (1993) Buildings and Power. Freedom and Control in the Origin of Modern Building Types. New York: Routledge.
- Miller S, Abalos E, Chamillard Met al. 2016 Beyond too little, too late and too much, too soon: a pathway towards evidence-based, respectful maternity care worldwide. *Lancet* 388(10056):2176-2192.
- Newburn M., Culture, control and the birth environment. *The Practising Midwife* [2003, 6(8):20-25]
- Newburn M. and Debbie Singh, 2003, "Creating a Better Birth Environment. Women's views about the design and facilities in maternity units: a national survey". The National Childbirth Trust. London, UK
- Penn, A. (2008) Architectural research. In Knight, A. and Ruddock, L. (eds) Advanced Research Methods in the Built Environment. Oxford: Wiley-Blackwell, pp. 14–27.
- Peponis, J., Zimring, C. and Scanlon, M.M. (1996) New design technologies: using computer technology to improve design quality. Part I: Designing friendly hospital layouts – the contribution of Space Syntax. *Journal of Healthcare Design*. VIII, pp. 109–115.
- Plough A, Polzin-Rosenberg D, Galvin G, Shao A, Sullivan B, Henrich N, T Shah N. 2018a An Exploratory Study of the Relationship between Facility Design and the Provision of Childbirth Care. *J Midwifery Womens Health*. 2018 Nov 8. doi: 10.1111/jmwh.12920. [Epub ahead of print]
- Plough A, Polzin-Rosenberg D, Galvin G, Shao A, Sullivan B, Henrich N, Shah NT. 2018b Assessing the Feasibility of Measuring Variation in Facility Design Among American Childbirth Facilities. *HERD*. 2018 Oct 3:1937586718796641. doi: 10.1177/1937586718796641. [Epub ahead of print]
- Preiser, W. F., White, E., & Rabinowitz, H. (2015). Post-Occupancy Evaluation (Routledge Revivals). Routledge. Priddis H., Hannah Dahlen, and Virginia Schmied. Juggling Instinct and Fear. INTERNATIONAL JOURNAL OF CHILDBIRTH Volume 1, Issue 4, 2011
- Priddis Holly, Hannah Dahlen, Virginia Schmied, What are the facilitators, inhibitors, and implications of birth positioning? A review of the literature. *Women and Birth* (2012) 25, 100–106
- Sadek AH, Shepley MM. 2016. Space Syntax Analysis: Tools for Augmenting the Precision of Healthcare Facility Spatial Analysis. *HERD*. 2016 Oct;10(1):114-29.
- Sailer, K. (2013). Organizational Learning and Physical Space: How Office Configurations Inform Organizational Behaviors. In A. Berthoin Antal, T. Meusburger, L. Suarsana (Eds.), *Learning Organizations. Extending the Field* (pp. 103-127). Dordrecht, The Netherlands: Springer Netherlands.
- Sailer, K., Budgen, A., Lonsdale, N., Turner, A., & Penn, A. (2009). Comparative studies of offices pre and post – how changing spatial configurations affect organisational behaviours. *Proceedings of the 7th International Space Syntax Symposium*, 96. Stockholm, Sweden: Royal Institute of

- Technology (KTH).
- Setola and Borgianni, 2016. Designing Public Spaces in Hospitals. Routledge, NY
- Setola N., 2014, Quality of space and right to health. An interdisciplinary research in hospital facilities, *Techne* n.7/2014. pp. 157-164.
- Setola, N. (2013) Percorsi, flussi e persone nella progettazione ospedaliera. L'analisi configurazionale, teoria e applicazione. Firenze: Firenze University Press.
- Setola N., Naldi E., Cocina G.G., Bodil Eide L., Iannuzzi L., Daly D. (2019) The Impact of the Physical Environment on Intrapartum Maternity Care. Identification of Eight Crucial Building Spaces. HERD - Health Environments Research & Design Journal
- Stenglin M, Foureur M. 2013. Designing out the Fear Cascade to increase the likelihood of normal birth. *Midwifery*. 2013 Aug;29(8):819-25.
- Symon, Andrew; Paul, Jeanette; Butchart, Maggie; Carr, Val; Dugard, Pat. 2008a. Maternity Unit Design study part 2: perceptions of space and layout. In: *British Journal of Midwifery*, Vol. 16, No. 2, 2008, p. 110-114.
- Symon, Andrew; Paul, Jeanette; Butchart, Maggie; Carr, Val; Dugard, Pat. 2008b. Maternity Unit Design part 3 : environmental comfort and control. In: *British Journal of Midwifery*, Vol. 16, No. 3, 2008, p. 167-171.
- Symon, Andrew; Paul, Jeanette; Butchart, Maggie; Carr, Val; Dugard, Pat. 2008c. Maternity Unit Design part 4 : midwives' perceptions of staff facilities. In: *British Journal of Midwifery*, Vol. 16, No. 4, 2008, p. 228-231.
- Townsend B., J. Fenwick , V. Thomson , M. Foureur. 2016. The birth bed: A qualitative study on the views of midwives regarding the use of the bed in the birth space. *Women and Birth* 29 (2016) 80–84
- Ulrich, R.S. et al. (2008) A review of the research literature on evidence-based healthcare design. HERD. 1(3), pp. 61–125
- Ulrich R., Barach P., 2006, Designing Safe Healthcare Facilities What are the Data and Where do we Go from Here? Healthcare Environments Research Summit, Robert Wood Johnson Foundation, Atlanta, GA
- Williams, H. (2003). Storied births: narrative and organisational culture in a midwifery-led birth Cent- re. London: Kings College