

A Review on The Role of Water in Forming Persian Garden Cities

Hirbod NOROUZIANPOUR, *M.Sc.Arch, M.Arch, H.P.R*

Independent Researcher, New Mexico, Albuquerque, USA

hirbod@unm.edu

+1 5056880648

4300 Bryn Mawr Dr. NE, Apt 23, Albuquerque, NM, USA, 87107

ORCID: 0000-0001-8379-9273

Abstract:

Being in balance with nature and coping with both its potential gifts and its threats is part of the human legacy of survival strategies and has been for centuries. Indeed, the heritage of previous generations is more than merely the beautiful built environment; it is also a source of profound knowledge about sustainable development, including sustainable hydrologic systems that support urban settlement in arid environments. In arid parts of the world such as Iran, hydrologic systems have been the backbone of settlements and urban development, while such systems dictate many aspects of living in these areas; this does not necessarily mean that they compromise residents' quality of life. The Persian Garden-City provides a powerful example of how a sustainable approach can lead to a higher quality of life without limiting prosperity. Studying these ancient settlements, moreover, can provide us with a deeper understanding of how to create a sustainable urban design in similar environments today. The present paper explores two main morphological patterns of Persian Garden-Cities through case studies - those of the cities of Taft and Isfahan- with a focus on the role of their hydrologic systems. The case studies delineate not only the differences in their urban pattern but also their means of dealing with water scarcity in ways that brought about prosperous lush urban dwellings.

Keywords: Persian Garden City, Sustainable Urban Design, Vernacular Urbanization, Hydrology, Isfahan, Taft.

Biography

Hirbod graduated from a concurrent program of “Master of Science in Public Health and the Built Environment” and “Masters of Architecture” in 2017 and the “Graduate-certificate in Historic Preservation and Regionalism” in 2019 at the University of New Mexico. As a teacher, researcher, and designer, He is involved with the community-based design, mostly focusing on the relation between design and communities' systemic wellbeing and historical cultural landscapes. Hirbod holds WELL AP and LEED GA accreditation and he is a member National Organization of Minority Architects (N.O.M.A.) and an associate member of AIA.

Bibliography:

Abbas, Mohamed, Nazanin Nafisi, and Sara Nafisi. “Persian Garden, Cultural Sustainability, and Environmental Design Case Study Shazdeh Garden.” *Procedia - Social and Behavioral Sciences* 222 (2016): 510–517. <https://doi.org/10.1016/j.sbspro.2016.05.142>.

Afshar Sistani, Iraj. *Yazd Heritages: Introduction to Historical buildings and Antiquities: Yazd's Soil*. Vol. 1. 2 vols. 0 (Society for the National Heritage of Iran, 1996).

Ahari, Zahra. “Isfahan’s Chahar Bagh Street, New concept of urban space.” *Golestan Honor*, no. 5 (2010). <http://ensani.ir/fa/article/4198>.

Ansari, Shaghayegh Moalemzadeh. “An Investigation into Water Usage and Water-Efficient Design for Persian Gardens,” (2015. <https://repository.arizona.edu/handle/10150/595836>).

Balali Oskouyi, Azita. “Comparative Study of Physical and Functional Structure in Tabriz Saheb-Abad Square and Isfahan Naghsh-e-Jahan Square in Historical Periods.” *Iran University of Science & Technology* 7, no. 1 [2019]: 21–42.

Batchelor, Peter. “The Origin of the Garden City Concept of Urban Form.” *Journal of the Society of Architectural Historians* 28, no. 3 [1969]: 184–200.

Cassen, R. H. *Our Common Future: Report of the World Commission on Environment and Development*. [JSTOR, 1987].

Danshdust, Y. “Tabas the City That Was (Garden of Tabas).” *Cultural Heritage and Tourism*, [1990].

Daubenton, Pierre. “Plane Tree.” *Encyclopedia of Diderot & d’Alembert - Collaborative Translation Project*, (April 2013. <http://hdl.handle.net/2027/spo.did2222.0002.280>).

Farahani, Leila Mahmoudi, Bahareh Motamed, and Elmira Jamei. “Persian Gardens: Meanings, Symbolism, and Design.” *Landscape Online* 46 [2016]: 1–19.

Gabriel, Alfons. *Die Erforschung Persiens: Die Entwicklung Der Abendländischen Kenntnis Der Geographie Persiens* [A. Holzhausens Nfg., 1952].

Gholipour, Soudabeh, and Vahid Heydarnattaj. "The Impact of Timurid Gardens in Samarkand on Safavid Gardens in Isfahan (Chaharbagh)," [2016].

Jani, Haza, Nor Zalina Harun, Mazlina Mansor, and Ismawi Zen. "Discovering the Values of the Islamic Garden." *Asian Journal of Behavioural Studies* 2 (December 2016).
<https://doi.org/10.21834/ajbes.v2i5.45>.

Karimiazari, Amirreza. "Analyses of Iranian Garden Design Art from Geometrical Structure View Case Study: Shahzade Mahan Kerman in Iran." *Sylwan* 158 (September 2014): 137–146.

Kellert, Stephen R. *The Biophilia Hypothesis* (Island Press, 1995).

Latif, Zainab, Mohd Yazid Mohd Yunus, and Maheran Yaman. "A Discourse on the Persian Chahar-Bagh as an Islamic Garden." *PLANNING MALAYSIA JOURNAL* 15 (November 2017).
<https://doi.org/10.21837/pmjournal.v15.i3.303>.

Movahed, Ehsan Allah. "Garden City (Iranian idea or European idea)." *Art and Architecture Journal*, no. 43–44 (1977).

Mozaffari, Ali, and Nigel Westbrook. "The Unfinished Museum: The Case of Pasargadae World Heritage Site Museum." In *Audience: Proceedings of the XXVIIIth International Conference of the Society of Architectural Historians, Australia and New Zealand* (Published for the Society of Architectural Historians Australia and New ..., 2011).

Noghsan Mohammadi, Mohammadreza, and Mohsen Dehghani Tafti. "Shah-Vali Complex, the Lasting Heritage of City of Taft." *Soffeh* Vol. 21, no. No. 4 (2017): 141–154.

Norouzianpour, Hirbod, and Hamed Mirjalili. "Searching for Roots of 'Garden-City' Pattern in Iran's Vernacular UrbanDesign; Comparative Study of the Garden City of Taft," (2012).
<https://doi.org/10.13140/RG.2.2.36386.94403>.

Norouzianpour, Hirbod, Mehri Motahari Motahari Rad, and Samane Motaghi Pische. "Persian Gardens Are Sustainable Gardens: Scrutinize the Sustainability Features in Persian Gardens." In *Archi-Cultural Translations through the Silk Road 2nd International Conference*, 2012, 14–16.

Papuli Yazdi, Muḥammad Ḥusayn, and Majid Labbaf Khiniki. *Qanāthā-Yi Taft*. 1st ed. [Tehran: Mu'āvanat-i Pizhūhishī-i Sāzmān-i Mīrās-i Farhangī-i Kishvar, Pizhūhishkadah-i Mardum'shināsī, 2003].

Rajabi, Maryam, Mahdi Montazerolhodjah, and Mohammadreza NoghsanMohammadi. "Stating the Pattern of Behavior Function in the Space of Hosseinieh in the City of Taft.," [May 2020].

Razavinia, Seyed Mohammad HOSEIN. "Semiotic Analysis of Isfahan School in Urban Planning and Architecture," (2018).

Roseland, Mark. "Sustainable Community Development: Integrating Environmental, Economic, and Social Objectives." *Progress in Planning* 54, no. 2 [2000]: 73–132.

Shahabinejad, Ali, Reza Abuei, and Mahmoud Ghalenoei. "The Naghsh-e Jahan Square Open Space; Values and Issues." *BAGH-E NAZAR* 13, no. 44 [2017]: 57–70.

Shahcheraghi, Azadeh. "Paradigms of Paradise: Recognition and Recreation of the Persian Garden." *Tehran-Iran: Acecr Tehran*, [2010].

Stierlin, Henri, and José Conesa. "Ispahan, Image Du Paradis," (1980).

UNESCO World Heritage Center. "The Persian Garden." UNESCO World Heritage Centre, 2011. <http://whc.unesco.org/en/list/1372/>.

UNESCO World Heritage Centre. "The Persian Qanat." UNESCO World Heritage Centre, 2016. <https://whc.unesco.org/en/list/1506/>.

Wilber, Donald N. *Persian Gardens & Garden Pavilions* [Tuttle Publishing, 1994].