# Teoria do Conhecimento e dos Espaços Construídos

PPGFAU–UnB 1.º/2021

## Professor: Pedro P. Palazzo

Teoria do espaço construído como desdobramento e especificação da teoria social. Espaço e sua produção a luz dos paradigmas de conhecimento contemporâneos, os conceitos de planejamento e de projeto do espaço: processos, características e tipos.

# 1 Programa

O programa pode sofrer alterações para melhor se adequar aos interesses de pesquisa dos alunos, à disponibilidade de material, e a imprevistos no desenrolar do semestre.

1. Epistemologia e classificação nas humanidades
2. Humanidades digitais dos princípios à prática
3. Sistemas de gestão de bibliografia
4. Introdução aos repositórios digitais e por que usar
5. Introdução ao controle de versão: GitHub
6. Transcrição digital de textos em TEI
7. Gestão de coleções com Tainacan e Omeka
8. Bases de dados personalizadas: vantagens e desvantagens
9. Representação aberta de espaços arquitetônicos
10. Análises espaciais: morfologia e sintaxe

## 2 Avaliação

Cada estudante deverá produzir uma implementação prática de um método de classificação e/ou processamento de dados relevante para a sua própria pesquisa. O produto será acompanhado de uma descrição justificativa do método escolhido, em cerca de 1000 palavras.

## 3 Bibliografia de referência

Abreu, Susana Matos. 2017. "Desafios da MIT num projecto em humanidades digitais: livros e arquitectura em Portugal e na Bahia, no cruzamento da história com a ciência da informação". *PontodeAcesso* 11 (1): 41–60. https://doi.org/10.9771/rpa. v11i1.23175.

Alves, Daniel. 2016. "As Humanidades Digitais como uma comunidade de práticas dentro do formalismo académico: dos exemplos internacionais ao caso português". *Ler História*, nº 69 (dezembro): 91–103. https://doi.org/10.4000/lerhistoria.2496.

Amoruso, Giuseppe. 2018. *Rappresentare la resilienza: modelli conoscitivi per la ricostruzione*. Milano: Lampi di Stampa. https://re.public.polimi.it/handle/11311/1095492.

Anderson, Clifford B., e Joseph Charles Wicentowski. 2020. *XQuery for Humanists*. First. Coding for Humanists. College Station: Texas A&M University Press.

"Apresentação". [s.d.]. *Spectrum PT*. Acessado 12 de junho de 2021. https://spectrum-pt.org/apresentacao/.

Baker, James. 2014. "Preserving Your Research Data". *Programming Historian*, abril. https://programminghistorian.org/en/lessons/preserving-your-research-data.

Bandyopadhyay, Soumyen, org. 2010. *The Humanities in Architectural Design: A Contemporary and Historical Perspective*. Milton Park, Abingdon, Oxon ; New York, NY: Routledge.

Bastos, Marcio Teixeira, Maria Isabel D'Agostino Fleming, e Vagner Carvalheiro Porto. 2017. "Arqueologia clássica e as humanidades digitais no Brasil". *Cadernos do LEPAARQ (UFPEL)* 14 (27): 10–28. https://doi.org/10.15210/lepaarq.v14i27.10544.

Batie, David L. 1997. "The Incorporation of Construction History in Architectural History: The HISTCON Interactive Computer Program". *Automation in Construction*,

Design Computation: Reasonong e Collaboration, 6 (4): 275–85. https://doi.org/10.1016/S0926-5805(97)00046-0.

Blaney, Jonathan, Jane Winters, Sarah Milligan, e Martin Steer. 2021. *Doing Digital History*. Manchester: Manchester University Press.

Bonini, Jacopo Alberto, Alessandro Mandelli, Stefano Marco De Gennaro, e Fabrizio Banfi. 2021. "BIM Interoperability: Open BIM-Based Workflow for Heritage Building Information Modelling (HBIM). a Multidisciplinary Approach Based on Advanced 3D Tools and Exchange Formats". In *Proceedings …*, 1–11. Valencia: Editorial Universitat Politécnica de Valéncia. https://doi.org/10.4995/arqueologica9.2021.12104.

Bryan, Paul. 2010. "Metric Survey for Preservation Uses: Past, Present, and Future". *APT Bulletin* 41 (4): 25–29. https://doi.org/10.2307/41000034.

BSI, British Standards Institution, org. 2005. *UDC : Universal Decimal Classification*. Third. London: British Standards Institution.

Buchin, Kevin, David Eppstein, Maarten Löffler, Martin Nöllenburg, e Rodrigo I. Silveira. 2011. "Adjacency-Preserving Spatial Treemaps". In *Algorithms and Data Structures*, organizado por Frank Dehne, John Iacono, e Jörg-Rüdiger Sack, 6844:159–70. Berlin; Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-22300-6_14.

Burch, Carl. 2010. "Django, a Web Framework Using Python: Tutorial Presentation". *Journal of Computing Sciences in Colleges* 25 (5): 154–55.

Burnard, Lou. 2013. "The Evolution of the Text Encoding Initiative: From Research Project to Research Infrastructure". *Journal of the Text Encoding Initiative*, nº Issue 5 (abril). https://doi.org/10.4000/jtei.811.

Carpes, Franciele Simon, e Daniel Flores. 2014. "Instrumento de descrição arquivística em meio eletrônico: definição do quadro de padrões, normas e metadados". *Perspectivas em Ciência da Informação* 19 (4): 67–80. https://doi.org/10.1590/1981-5344/1734.

Castellano-Román, Manuel, e Francisco Pinto-Puerto. 2019. "Dimensions and Levels of Knowledge in Heritage Building Information Modelling, HBIM: The Model of the Charterhouse of Jerez (Cádiz, Spain)". *Digital Applications in Archaeology and Cultural Heritage* 14 (setembro): e00110. https://doi.org/10.1016/j.daach.2019.e00110.

Cimadomo, Guido. 2014. "Teaching History of Architecture: Moving from a Knowledge Transfer to a Multi-Participative Methodology Based on Its Tools". *Journal of Learning Design* 7 (3): 79–90. https://doi.org/10.5204/jld.v7i3.178.

Cogdell, Christina. 2019. *Toward a Living Architecture? Complexism and Biology in Generative Design*. Minneapolis: University of Minnesota Press. https://doi.org/

10.5749/j.ctv9b2tnw.

Cory, Kenneth A. 1997. "Discovering Hidden Analogies in an Online Humanities Database". *Computers and the Humanities* 31 (1): 1–12. https://doi.org/10.1023/A: 1000422220677.

Cuenca, Esther Liberman, e Maryanne Kowaleski. 2018. "Omeka and Other Digital Platforms for Undergraduate Research Projects on the Middle Ages". *Digital Medievalist* 11 (1): 3. https://doi.org/10.16995/dm.69.

Diara, Filippo, e Fulvio Rinaudo. 2020. "IFC Classification for FOSS HBIM: Open Issues and a Schema Proposal for Cultural Heritage Assets". *Applied Sciences* 10 (23): 8320. https://doi.org/10.3390/app10238320.

"Digitalização de monumentos". [s.d.]. Acessado 30 de julho de 2020. https://revist apesquisa.fapesp.br/digitalizacao-de-monumentos/.

Doerr, Martin. 2003. "The CIDOC Conceptual Reference Module: An Ontological Approach to Semantic Interoperability of Metadata". *AI Magazine* 24 (3): 75–75. https://doi.org/10.1609/aimag.v24i3.1720.

Dore, C., e M. Murphy. 2017. "Current State of the Art Historic Building Information Modelling". *ISPRS - International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences* XLII-2/W5 (agosto): 185–92. https://doi.org/10 .5194/isprs-archives-XLII-2-W5-185-2017.

Freire de Oliveira, Adriana, Jean-Baptiste Scharffhausen, e Tomás Albuquerque Lapa. 2020. "Uso de tecnologias digitais no processo de documentação do patrimônio: o caso do vilarejo de Thillois na França". *Labor e Engenho* 14 (dezembro): e020019–19. https://doi.org/10.20396/labore.v14i0.8663507.

Gabellone, Francesco. 2015. "Digital Technologies and Communication: Prospects and Expectations". *Open Archaeology* 1 (1). https://doi.org/10.1515/opar-2015-0005.

Gibson Laura Kate. 2013. "South Africa and the International SPECTRUM of Museum Standards". *South African Museums Association Bulletin* 36 (1): 41–46. https: //doi.org/10.10520/EJC137450.

Gourley, Donald, e Paolo Battino Viterbo. 2010. "A Sustainable Repository Infrastructure for Digital Humanities: The DHO Experience". In *Digital Heritage*, organizado por Marinos Ioannides, Dieter Fellner, Andreas Georgopoulos, e Diofantos G. Hadjimitsis, 473–81. Lecture Notes em Computer Science. Berlin, Heidelberg: Springer. https://doi.org/10.1007/978-3-642-16873-4_38.

Gualberto, Ana Cristina Ferrari. 2012. "Aplicação da ferramenta DSM - Design Structure Matrix ao planejamento do processo de projeto de edificações." {Dissertação de Mestrado em Engenharia de Construção Civil e Urbana}, São Paulo: Universidade de São Paulo, Escola Politécnica. https://doi.org/10.11606/D.3.2012.tde-

04062013-143901.

Harpring, Patricia. 2016. *Introdução aos vocabulários controlados: terminologia para arte, arquitetura e outras obras culturais*. Traduzido por Murtha Baca. Introduction to Controlled Vocabularies: Terminology for Art, Architecture, e Other Cultural Works. Los Angeles: Getty Research Institute, 2013. São Paulo: Secretaria da Cultura do Estado : Pinacoteca de São Paulo : ACAM Portinari.

Hazarika, Hirak Jyoti, e S. Ravikumar. 2019. "Comparative Study between Omeka, DSpace and E-Print: A Special Reference with Plugin Features". In *12th International CALIBER*. Bubaneshwar: KIIT. http://ir.inflibnet.ac.in:8080/ir/handle/1944/2330.

Hensel, Michael, org. 2004. *Emergence: Morphogenetic Design Strategies*. Architectural Design Profile 169. Chichester: Wiley-Academy.

Ide, Nancy, e Jean Véronis. 1995. *Text Encoding Initiative: Background and Contexts*. Cham: Springer Science & Business Media.

International Council of Museums. [s.d.]. "CIDOC CRM". Acessado 23 de abril de 2021. http://www.cidoc-crm.org/.

Kivilcim, Cemal Özgür, e Zaide Duran. 2021. "Parametric Architectural Elements from Point Clouds for HBIM Applications". *International Journal of Environment and Geoinformatics* 8 (2): 144–49. https://doi.org/10.30897/ijegeo.803334.

Kling, Mattias. 2015. *Developing a Source Criticism Learning Activity for a Digital Learning Environment in History*. http://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-118311.

Korro Bañuelos, Jaione, Álvaro Rodríguez Miranda, José Manuel Valle-Melón, Ainara Zornoza-Indart, Manuel Castellano-Román, Roque Angulo-Fornos, Francisco Pinto-Puerto, Pilar Acosta Ibáñez, e Patricia Ferreira-Lopes. 2021. "The Role of Information Management for the Sustainable Conservation of Cultural Heritage". *Sustainability* 13 (8): 4325. https://doi.org/10.3390/su13084325.

Krüger, Mário Júlio Teixeira. 2001. "A arte da investigação em Arquitectura". *Em cima do Joelho*, nº 5: 22–39. https://doi.org/10.14195/0874-6168_5_3.

Kucsma, Jason, Kevin Reiss, e Angela Sidman. 2010. "Using Omeka to Build Digital Collections: The METRO Case Study". *D-Lib Magazine* 16 (3/4). https://doi.org/10.1045/march2010-kucsma.

Kulkarni, Uday, S. M. Meena, Sunil V. Gurlahosur, e Uma Mudengudi. 2019. "Classification of Cultural Heritage Sites Using Transfer Learning". In *2019 IEEE Fifth International Conference on Multimedia Big Data (BigMM)*, 391–97. https://doi.org/10.1109/BigMM.2019.00020.

Langmead, Alison. 2018. "Art and Architectural History and the Performative, Mindful Practice of the Digital Humanities". *The Journal of Interactive Technology and Peda-*

*gogy*, nº 12 (fevereiro). https://jitp.commons.gc.cuny.edu/art-and-architectural-history-and-the-performative-mindful-practice-of-the-digital-humanities/.

Li, Bin, Yaxin Li, Qian Yang, Yaqi Wang, e Rui Chen. 2020. "From History Book to Digital Humanities Database: The Basic Annals of the Shiji". *Journal of Chinese History* 中国历史学刊 4 (2): 528–36. https://doi.org/10.1017/jch.2020.24.

Machete, Rita, Ana Paula Falcão, Alexandre B. Gonçalves, Márcia Godinho, e Rita Bento. 2020. "Development of a Manueline Style Object Library for Heritage BIM". *International Journal of Architectural Heritage*, março, 1–12. https://doi.org/10.1080/15583058.2020.1740825.

Mamoli, Myrsini. 2020. "A Shape Grammar for the Building-Type Definition of the Ancient Greek and Roman Library and the Evaluation of Library Plans". *Artificial Intelligence for Engineering Design, Analysis and Manufacturing* 34 (2): 191–206. https://doi.org/10.1017/S0890060420000189.

Maron, Deborah, e Melanie Feinberg. 2018. "What Does It Mean to Adopt a Metadata Standard? A Case Study of Omeka and the Dublin Core". *Journal of Documentation* 74 (4): 674–91. https://doi.org/10.1108/JD-06-2017-0095.

Martins, Luciana Conrado, e Dalton Lopes Martins. 2020. "Experimentações socio-técnicas para organização e difusão de coleções digitais universitárias: o caso do projeto Tainacan". *Revista CPC* 15 (30esp): 34–61. https://doi.org/10.11606/issn.1980-4466.v15i30espp34-61.

Mateus, João Mascarenhas, e Ivo Veiga. 2020. "Portugal builds: uma plataforma digital para a história da construção em Portugal nos séculos XIX e XX". *Estudos Históricos (Rio de Janeiro)* 33 (março): 88–110. https://doi.org/10.1590/S2178-14942020000100006.

Mattern, Eleanor. 2016. "Creating Digital Collections with Omeka". Conference. Hillman Library, University of Pittsburgh: University of Pittsburgh. http://d-scholarship.pitt.edu/26779/.

McKee, Harley J. 1970. *Recording Historic Buildings*. Washington, D.C: National Park Service.

Mitchell, William J. (William John). 1990. *The Logic of Architecture : Design, Computation, and Cognition*. Cambridge, Mass.: MIT Press. http://archive.org/details/logicofarchitect00mitc.

Monteiro, Juliana, e Marilda Ginez Lopes de Lara. 2014. "A noção de documentação em museus nas normas Spectrum e CIDOC/ICOM", dezembro. http://repositorios.questoesemrede.uff.br/repositorios/handle/123456789/2600.

Mora, Rocío, Luis Javier Sánchez-Aparicio, Miguel Ángel Maté-González, Joaquín García-Álvarez, María Sánchez-Aparicio, e Diego González-Aguilera. 2021. "An Historical Building Information Modelling Approach for the Preven-

tive Conservation of Historical Constructions: Application to the Historical Library of Salamanca". *Automation in Construction* 121 (janeiro): 103449. https://doi.org/10.1016/j.autcon.2020.103449.

Morton, Amanda. 2011. "Digital Tools: Zotero and Omeka". *Journal of American History* 98 (3): 952–53. https://doi.org/10.1093/jahist/jar520.

Münster, Sander. 2018. "Cultural Heritage at a Glance : Four Case Studies about the Perception of Digital Architectural 3D Models". In *2018 3rd Digital Heritage International Congress (DigitalHERITAGE) Held Jointly with 2018 24th International Conference on Virtual Systems Multimedia (VSMM 2018)*, 1–4. https://doi.org/10.1109/DigitalHeritage.2018.8810066.

Münster, Sander, e Melissa Terras. 2020. "The Visual Side of Digital Humanities: A Survey on Topics, Researchers, and Epistemic Cultures". *Digital Scholarship in the Humanities* 35 (2): 366–89. https://doi.org/10.1093/llc/fqz022.

Oliveira, Vítor, org. 2021. *Morphological Research in Planning, Urban Design and Architecture*. Cham: Springer.

Piotrowski, Andrzej, e Julia W. Robinson, orgs. 2001. *The Discipline of Architecture*. Minneapolis: University of Minnesota Press.

Presner, Todd, David Shepard, e Yoh Kawano. 2014. *Hypercities Thick Mapping in the Digital Humanities*. https://escholarship.org/uc/item/3mh5t455.

Quattrini, Ramona, Roberto Pierdicca, e Christian Morbidoni. 2017. "Knowledge-Based Data Enrichment for HBIM: Exploring High-Quality Models Using the Semantic-Web". *Journal of Cultural Heritage* 28 (novembro): 129–39. https://doi.org/10.1016/j.culher.2017.05.004.

Rasmussen, Mads Holten, Pieter Pauwels, Maxime Lefrançois, e Georg Ferdinand Schneider. 2021. "Building Topology Ontology". Draft {{Community Group Report}}. Linked Building Data Community Group : World Wide Web Consortium. https://w3c-lbd-cg.github.io/bot/.

Rollo, Maria Fernanda. 2020. "Desafios e responsabilidades das humanidades digitais: preservar a memória, valorizar o patrimônio, promover e disseminar o conhecimento. o programa memória para todos". *Estudos Históricos (Rio de Janeiro)* 33 (março): 19–44. https://doi.org/10.1590/S2178-149420200001000003.

Ronzino, Paola, Nicola Amico, e Franco Niccolucci. 2011. "Assessment and Comparison of Metadata Schemas for Architectural Heritage". In *XXIII International CIPA Symposium*. Prague: ISPRS : CIPA Heritage Documentation. https://www.conferencepartners.cz/cipa/proceedings/.

Rupnik, Ewelina, Mehdi Daakir, e Marc Pierrot Deseilligny. 2017. "MicMac – a Free, Open-Source Solution for Photogrammetry". *Open Geospatial Data, Software and Standards* 2 (1): 14. https://doi.org/10.1186/s40965-017-0027-2.

Said, Suzana; Mohamed R. Embi. 2007. "Towards a Digital Representation of Vernacular Architecture – the Traditional Malay Houses in Perspective". In *CAADRIA 2007 [Proceedings of the 12th International Conference on Computer Aided Architectural Design Research in Asia] Nanjing (China) 19-21 April 2007*. CUMINCAD. http://papers.cumincad.org/cgi-bin/works/Show?caadria2007_211.

Scianna, Andrea, Giuseppe Fulvio Gaglio, e Marcello La Guardia. 2020. "HBIM Data Management in Historical and Archaeological Buildings". *Archeologia e Calcolatori* 31 (1): 231–52. https://doi.org/10.19282/ac.31.1.2020.11.

Serafin-Prusator, Ewa, e Maciej Tarkowski. 2020. "Incomplete Architectural Projects – a Digital Repository Based on the OMEKA System". In *Post-Proceedings*, organizado por Sanita Reinsone, Inguna Skadiņa, Jānis Daugavietis, e Anda Baklāne. Rīga: CEUR Workshop. http://ceur-ws.org/Vol-2865/.

Sieber, Renee E., Christopher C. Wellen, e Yuan Jin. 2011. "Spatial Cyberinfrastructures, Ontologies, and the Humanities". *Proceedings of the National Academy of Sciences* 108 (14): 5504–9. https://doi.org/10.1073/pnas.0911052108.

Siemens, Ray, e Susan Schreibman. 2013. *A Companion to Digital Literary Studies*. Malden: Blackwell. http://0-onlinelibrary.wiley.com.cataleg.uoc.edu/book/10.1002/9781405177504.

Soderberg, Courtney K. 2018. "Using OSF to Share Data: A Step-by-Step Guide". *Advances in Methods and Practices in Psychological Science* 1 (1): 115–20. https://doi.org/10.1177/2515245918757689.

Souza, Marcia Izabel Fugisawa, Laurimar Gonçalves Vendrusculo, e Geane Cristina Melo. 2000. "Metadados para a descrição de recursos de informação eletrônica: utilização do padrão Dublin Core". *Ciência da Informação* 29 (abril): 93–102. https://doi.org/10.1590/S0100-19652000000100010.

Suárez, Juan-Luis, Fernando Sancho Caparrini, e Javier de la Rosa Perez. 2011. "The Art-Space of a Global Community: The Network of Baroque Paintings in Hispanic-America". In *2011 Second International Conference on Culture and Computing*, 45–50. https://doi.org/10.1109/Culture-Computing.2011.17.

Tainacan.org. [s.d.]. "Tainacan". *WordPress.org Brasil*. Acessado 12 de junho de 2021. https://br.wordpress.org/plugins/tainacan/.

Teixeira Cavalcanti, Marcia, Ricardo Medeiros Pimenta, e Josir Cardoso Gomes. 2019. "Criação de um repositório temático no contexto das humanidades digitais para gestão da informação". In *IX Conferência Internacional sobre Bibliotecas e Repositórios Digitais da América Latina BIREDIAL – ISTEC Anais das sessões temáticas (São Paulo, 2019)*. http://sedici.unlp.edu.ar/handle/10915/86544.

"The Programming Historian em português". [s.d.]. *Programming Historian*. Acessado 12 de junho de 2021. https://programminghistorian.org/pt/.

Tice, Paul. 2016. "Historic Building Information Modeling (HBIM) - A Comprehensive Approach to the "I" in BIM". *LinkedIn Pulse*. https://www.linkedin.com/pulse/historic-building-information-modeling-hbim-approach-paul-tice.

Zhang, A., e D. Gourley. 2003. "A Digital Collections Management System Based on Open Source Software". In *2003 Joint Conference on Digital Libraries, 2003. Proceedings.*, 381–81. https://doi.org/10.1109/JCDL.2003.1204928.