

# **TASARIM VE DUYGULANIM**

**Çağrı Barış KASAP**



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## KAYNAKLAR

- Alben, L. (1996). Quality of experience: defining the criteria for effective interaction design. *Interactions* (3), 11-15.
- Alexander, C. (1964). *Notes on the synthesis of form*, Harvard University Press.
- Ahmed, S. (2004). *The cultural politics of emotion*. Edinburgh: Edinburgh University Press.
- Akner-Koler, C. (2007). *Form & formless*. Axl Books.
- Ashby, M. & Johnson, K. (2002). *Materials and design: the art and science of material selection in product design*. Oxford: Butterworth-Helmann
- Baker, U. (2020). *From opinions to images: towards a sociology of affects*. (Ed.: Aras Özgün & Andreas Treske). Amsterdam: Institute of Network Cultures.
- Balibar, E. (1997). ‘Spinoza: From Individuality to Transindividuality’, *Mededelingen vanwege het Spinozahuis*, (71), Delft: Eburon.
- Barad, K. (2003). Posthumanist performativity: toward an understanding of how matter comes to matter. *Gender and Science: New Issues*, (28)3, 801-831.
- Bardzell, J. (2009). Interaction criticism and aesthetics. *Proc. of CHI '09. ACM*, 2357-2366
- Belk, R.W. (1988). Possessions and the extended self. *Journal of Consumer Research*, (15)2, 139-168.
- Blevis, E. (2007). Sustainable interaction design: invention & disposal, renewal & reuse. In *Proceedings of CHI '07. ACM*, 503-512.
- Blevis, E., Lim, Y., & Stolterman, E. (2006). *Regarding software as a material of design*. Design Research Society Conference.
- Blythe, M.A., Overbeeke, K., Monk, A.F. & Wright, P.C. (2004). *Futuology: from usability to enjoyment*. Dordrecht: Kluwer Academic Publishers.
- Bodker, S. (2006). When second wave HCI meets third wave challenges. In: *NordiCHI'06: Proceedings of the 4<sup>th</sup> Nordic Conference on Human-Computer Interaction: Changing Roles*. 1-8.
- Bonanni, L., Parkes, A., & Ishii, H. (2008). Future craft: how digital media is transforming product design. In *Proceedings of CHI '08. ACM*, 2553-2564.

- Borgmann, A. (1984). *Technology and the character of contemporary life: a philosophical inquiry*. Chicago: The University of Chicago Press.
- Brennan, T. (2004). *The transmission of affect*. Cornell University Press.
- Buechley, L., Rosner, D., Paulos, E., & Williams, A. (2009). DIY for CHI: methods, communities, and values of reuse and customization. *Workshop at CHI '09. ACM*, 4823-4826
- Carroll, J. M., Kellogg, W. A., & Rosson, M. B. (1991). The task-artifact cycle. In *Designing interaction*, London: Cambridge University Press, 74-102.
- Citton, Y. (2010). *Mythocratie: storytelling et imaginaire de gauche*. Paris: Éditions Amsterdam.
- Combes, M. (1999). *Simondon: Individu et collectivité. Pour une philosophie du transindividuel*, Paris:Presses Universitaires de France.
- Cross, N. (2001). Designerly ways of knowing: design discipline versus design science. *Design Issues* 17 (3), 49-55.
- Csikszentmihalyi, M. (1990). *Flow: the psychology of optimal experience*. New York: Harper and Row.
- Csikszentmihalyi, M. (1991). Design and order in everyday life. *Design Issues*, (1), 26-34.
- DeLanda, M. (2002). *Intensive science and virtual philosophy*. London & New York: Continuum.
- DeLanda, M. (2004). *A new philosophy of society*. London: Bloomsbury.
- Deleuze, Gilles. (1966). Review of Gilbert Simondon's l'individu et sa genèse physico-biologique. *Pli:The Warwick Journal of Philosophy* 12 (2001), 43-49.
- Deleuze, Gilles. (1968). *Spinoza et le problème de l'expression*, Paris: Editions de Minuit.
- Deleuze, G. (1988). *Spinoza: practical philosophy*, San Francisco: City Lights Books.
- Deleuze, G. (1990). *The logic of sense*, New York: Columbia University Press.
- Deleuze, G. (1995). *Difference and repetition*, New York: Columbia University Press.
- Demir, E. (2008). ‘The field of design and emotion: concepts, arguments, tools and current issues.’ *Middle East Technical University, Journal of the Faculty of Architecture*, (25)1, 135-162.
- Design and Emotion Society.. <https://www.dexigner.com/>
- Desmet, P. M. A. (2002). Designing Emotions. Delft: Delft University of Technology.

- Desmet, P. (2004). 'Measuring emotions: development and application of an instrument to measure emotional responses to products.' In *Funology: from Usability to Enjoyment*, 111-123.
- Desmet, P., van Erp J. and Karlsson, M. (Eds.). (2008). *Design and emotion moves*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Desmet, P. & Hekkert, P. (2007). Framework of product experience. *International Journal of Design*, 3 (2), 1-6.
- Desmet P., Pohlmeier A., Forlizzi J. (2013). Special issue editorial: design for subjective well-being. *International Journal of Design*, 7 (3).
- Dewey, J. (2005). *Art as experience*. Perigee Trade.
- DiSalvo, C., Forlizzi, J., Hanington, B. (2003). On the relationship between emotion, experience, and the design of new products. *Design Journal*, (6)2, 29-38.
- DiSalvo, C., Forlizzi, J., Hanington, B. (2004). An accessible framework of emotional experiences for new product conception. In: McDonagh Deana, Hekkert Paul, van Erp
- Djajadiningrat, T., Wensveen, S., Frens, J., & Overbeeke, K. (2004). Tangible products: redressing the balance between appearance and action. *Personal Ubiquitous computing*, 8(5), 294-309.
- Dourish, P. (2001). *Where the action is: the foundations of embodied interaction*. Cambridge, MA: MIT Press
- Ehn, P. (1998). Manifesto for a digital bauhaus. *Digital Creativity*, 9 (4), 207-216.
- Ewen, S. (2001 [1976]). *Captains of consciousness: Advertising and the social roots of the consumer culture*, New York: Basic Books.
- Fogg, B.J., 2013. Fogg method: 3 steps to changing behavior. (<https://www.foggmethod.com/>)
- Forlizzi, J. (2008). The Product Ecology: Understanding social product use and supporting design culture. *International Journal of Design*, 2(1), 11-20.
- Gaver, B., Bowers, J., Boucher, A., Gellerson, H., Pennington, S., Schmidt, A., Steed, A., Villars, N., Walker, B. (2004). The drift table: designing for ludic engagement. In: *CHI '04, Extended Abstracts on Human Factors in Computing Systems (CHI EA '04)*. ACM, New York, pp. 885–900.
- Gaver B, Dunne T, Pacenti E. (1999) Cultural probes: novel interaction techniques to increase the presence of the elderly in their local communities. *Interactions*, (6) 21–29.
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Houghton Mifflin, Boston.

- Giaccardi, E. ve E. Karana. (2015). Foundations of materials experience. In *Proceedings of the 33rd Annual ACM Conference*.
- Goffman, E. (1959). *The presentation of self in everyday life*. Garden City, N.Y.: Doubleday.
- Hanington B, Martin M. (2012). *Universal methods of design: 100 ways to research complex problems, develop innovative ideas and design effective solutions*. Beverly, MA: Rockport Publishers.
- Hanington, B. (2017). 'Design and emotional experience.' In *Affective Sciences in human factors and human-computer interaction*, 348-386.
- Hassenzahl, M. (2008). User experience (UX): towards an experiential perspective on product quality. In *Proceedings of the 20<sup>th</sup> International Conference of the Association Francophone d'Interaction Homme-Machine*. ACM, Metz, France, 11-15.
- Heskett, J. (1985). *Industrial design*. Thames & Hudson.
- Höök, K. (2009). *Affective loop* ([https://www.sics.se/~kia/aff\\_loop.html](https://www.sics.se/~kia/aff_loop.html))
- Husserl, E. (1991). *On the phenomenology of the consciousness of internal time (1893-1917)*. (trans. John Barnett Brough). Dordrecht: Kluwer.
- International Organization for Standardization, 2010. Ergonomics of Human- System Interaction: Part 9241-210.
- Ihde, D. (1990). *Technology and the lifeworld: From garden to earth*. Bloomington, IN: Indiana University Press.
- Illiadis, Andrew (2013) Informational Ontology: The Meaning of Gilbert Simondon's Concept of Individuation, *Communication +1*, (2)1, Article 5.
- James, W. (1890). *The principles of psychology*. New York: H. Holt and Company.
- Jordan, P.W. (2000). *Designing pleasurable products: an introduction to the new human factors*. London: Taylor and Francis.
- Jung, H., Bardzell, S., Blevis, E., Pierce, J. and Stolterman, E. (2011). How deep is your love: deep narratives of ensoulment and heirloom status, *International Journal of Design* (IJD).
- Jung, H. and Stolterman, E. (2011). Material probe: exploring materiality of digital artifacts, *Proceedings of TEI '11. ACM*, 153-156.
- Jung, H. ve E. Stolterman (2012). Digital form and materiality: propositions for a new approach to interaction design research. In *Proceedings of the 7th Nordic Conference on Human-Computer Interaction: Making Sense Through Design*, 645-654.
- Kiernan, T. R. (1962). *Aristoteles dictionary*. New York: Philosophical Library.

- Kleine, S.S. & Baker, S.M. (2004). An integrative review of material possession attachment. *Academy of Marketing Science Review*, (1), 1-35.
- Kleine, S.S. Kleine, R.E., Allen, C.T. (1995). ‘How is a possession ‘me’ or ‘not me’? characterizing types and an antecedent of material possession attachment.’ *Journal of Consumer Research*, (22)3, 327-343.
- Krippendorff, K. (1989). On the essential contexts of artifacts or on the proposition that “design is making sense (of things)”, *Design Issues*, 5 (2), 9-39.
- Krippendorff, K. (2005). *The semantic turn: a new foundation for design*. Boca Raton, Fla: Taylor and Francis.
- Krippendorff, K. (2006). *The semantic turn: a new foundation for design*. Boca Raton, FL: CRC Press.
- Krippendorff , K. & Butter R. (1984). Product semantics: exploring the symbolic qualities of form.’ *Innovation*, (3)2, 4-9.
- Kunjavsky, M. (2003). *Observing the user experience: a practitioner’s guide to user research*. Morgan Kaufmann Publishers Inc.
- Kuru, A. & Forlizzi, J. (2015). Engaging experience with physical activity tracking products. In Marcus A. (ed.) DUXU 2015, Part I, lncs 9186, 490-501.
- Kurtgozu, A. (2003). From function to emotion: a critical essay on the history of design arguments. *The Design Journal*, (6) 2, 49-59.
- Lalande P., Racine M., Colby C., Joyce A. (2010). *Metacycling, An International Collaborative Project Promoting Sustainable Design*. Valencia, Spain: International Technology, Education and Development.
- Lalande, P., Racine M. (2006). The metamorphosis of products: a sustainable design strategy that favours increased attachment. In *Proceedings of the International Conference on Design and Emotion*. Design and Emotion Society, Goteborg, Sweden: 1-17.
- Latour, B. (1999). *Pandora’s Hope. Essays on the reality of science studies*. Harvard University Press.
- Latour B. (2005). *Reassembling the social: an introduction to actor-network theory*. Oxford and New York, Oxford University Press.
- Lazzarato, M. (2006) The concepts of life and the living in the societies of control, In Fuglsng M. and Sorensen B.M. (eds.) *Deleuze and the Social*, Edinburgh: Edinburgh University Press: 170-190.
- Lefebvre, R. (2011). Game visionary Jesse Schell talks about the pleasure revolution (<https://venturebeat.com/games/jesse-schell-talks-about-the-pleasure-revolution/>)

- Leroi-Gourhan, André 1993 [1965], *Gesture and Speech*, translated by Anna Bostock Berger, Cambridge, ma: mit Press.
- Leontiev, A. (1978). *Activity, consciousness and personality*. Englewood Cliffs, NJ: Prentice-Hall.
- Lidwell, W., Holden, K., Butler, J., Elam, K. (2010). *Universal principles of design: 125 ways to enhance usability, influences perception, increase appeal, make better design decisions and teach through design*. Beverly, Mass: Rockport Publishers.
- Ljungblad, S., & Holmquist, L. E. (2007). Transfer scenarios: grounding innovation with marginal practices. In *Proceedings of CHI'07. ACM*, 737-746.
- Lordon, F. (2014). *Willing slaves of capital: Spinoza and Marx on desire*. (trans. Gabriel Ash). New York: Verso.
- Löwgren, J., & Stolterman, E. (2004). Thoughtful interaction design: a design perspective on information technology. Cambridge, MA, USA: MIT Press.
- Marenko, B. (2010). Contagious affectivity: the management of emotions in late capitalist design. In *Negotiating Futures, Design Fiction*. 6th Swiss Design Network Conference. Basel, 134-149.
- Marx, K. (1973) [1857]. *Grundrisse: Foundations of the critique of political economy*. (trans. Martin Nikolaus). New York: Penguin.
- Massumi, B. (2002). *Parables for the virtual: movement, affect, sensation*. Durham & London, Duke University Press.
- McAdams, D.P. (2001). The psychology of life stories. *Review of General Psychology*, (5)2, 100-122.
- McCarthy, J. & Wright, P. (2004). *Technology as experience*. Cambridge, Mass: MIT Press.
- McDonagh, D.C., Hekkert, P., van Erp, J. & Gyi, D. (Eds.) (2004) *Design and emotion: the experience of everyday things*. London, New York, Taylor & Francis.
- Miller, D. (1998). Material cultures: why some things matter. Chicago: University of Chicago Press
- Moreau,P.-F. ve Morfino, V. (2014). *Plural temporality: Transindividuality and the aleatory between spinoza and althusser*. (trans. Jason E. Smith, Ted Stolze, Sara Farris and Zakiya Hanafi). Leiden: Brill.
- Nielson, J. (1993). *Usability engineering*. Morgan Kaufmann Publishers Inc.
- Norman, D. (2004). *Emotional design: why we love (or hate) everyday things*. New York: Basic Books.

- Odom, W., Zimmerman, J., Forlizzi, J. (2011). Teenagers and their virtual possessions: design opportunities and issues. *Conference on Human Factors in Computing Systems – Proceedings*, 1491-1500.
- Odom, W., Zimmerman, J., Forlizzi J., Choi, H., Meier, S., Park, A. (2012). Investigating the presence, form and behaviour of virtual possessions in the context of a teen bedroom. In *Proceedings of the Conference on Human Factors in Computing Systems*, 327-336.
- Odom, W., Forlizzi, J., Zimmerman, J., Sellen, A., Banks, R., Regan, T., Selby, M., (2014). Designing for slowness, anticipation and re-visitation: a long term field study of the photobox. In *Proceedings of the Conference on Human Factors in Computing Systems*. 1961–1970.
- Palmas, K. (2010) The defense minister's new philosophy, Eurozine, [www.eurozine.com](http://www.eurozine.com).
- Platon (1991), *The republic*, trans. B. Jowett, New York: Vintage Classics.
- Picard, R. (1995). Affective computing. M.I.T. Media Laboratory Perceptual Computing Section Technical Report, no. 321.
- Picard, R. (1997). *Affective computing*. Cambridge, Mass: MIT Press.
- Ramond, C. (2007). *Dictionnaire Spinoza*. Paris: Ellipses.
- Read, J. (2016). *The politics of transindividuality*. Brill: Leiden/Boston, MA.
- Risatti, H. (2007). *A theory of craft: function and aesthetic expression*. The University of North Carolina Press.
- Robles, E., & Wiberg, M. (2010). Texturing the “material turn” in interaction design. In *Proceedings of TEI '10. ACM*, 137-144.
- Rochberg-Halton, E. & Csikszentmihalyi, M. (1981). *The meaning of things: domestic symbols and the self*. New York: Cambridge University Press.
- Rosner, D. K and Taylor. A. S. (2011). Antiquarian answers: book restoration as a resource for design. *Proceedings of CHI '11. ACM*, 2665-2668.
- Russell, J. A. (1980). A Circumplex Model of Affect. *Journal of Personality and Social Psychology*, 39(6): 1161-1178.
- Sanders E.B-N., Stappers P.J. (2012.) *Convivial Toolbox: Generative Research for the Front End of Design*. Amsterdam: BIS.
- Savas, O. (2008). Emotions for the necessary. METU (Middle East Technical University), Journal of the Faculty of Architecture, (25) 1, 163-175.
- Scupelli, P., and Hanington, B. (2014) An Evidence-based design approach for function, usability, emotion, and pleasure in studio redesign, in Lim, Y., Niedderer, K., Redström, J., Stolterman, E. and Valto-

- nen, A. (eds.), Design's Big Debates - DRS International Conference 2014, 16-19 June, Umeå, Sweden.
- Sévérac, P. (2005). *Le devenir actif chez Spinoza*. Paris: Honoré Champion.
- Sharp, Hasana 2011, *Spinoza and the politics of renaturalization*. Chicago, IL: University of Chicago Press.
- Simondon, G. (1958) *Du mode d'existence des objets techniques*, Paris: Aubier.
- Simplicius. (1992). *On Aristotle's physics*, Bristol: Bristol Classical Press.
- Spinoza, B. (1993) *Ethics*. London, Everyman.
- Stiegler (1998) *Technics and time, 1: The fault of Epimetheus*. (trans. by Richard Beardsworth and George Collins). Stanford, CA: Stanford University Press.
- Stiegler (2006a) *Mécréance et discrédit: 2. Les sociétés incontrôlables d'individus désaffectés*, Paris: Galilée.
- Stiegler (2006b) *Mécréance et discrédit: 3. L'esprit perdu du capitalisme*, Paris: Galilée.
- Stiegler, B. (2008) *Biopower, psychopower and the logic of the scapegoat*. The Philosophy of Technology Workshop, Manchester Metropolitan University,
- Stiegler, B. (2009 [2003]) *Acting Out*, translated by David Barison, Daniel Ross and Patrick Crogan, Stanford, ca: Stanford University Press.
- Stiegler, B. (2010a). *For a New Critique of Political Economy*. London, Polity Press.
- Stiegler, B. (2010b). *Taking Care of Youth and the Generations*, translated by Stephen Barker, Stanford, ca: Stanford University Press.
- Stiegler, B. (2011a [2004]). *The Decadence of Industrial Democracy*. (trans. Daniel Ross). London: Polity.
- Stiegler, B. (2011b [2001]). *Technics and Time, 3: Cinematic Time and the Question of Malaise*, translated by Stephen Barker, Stanford, ca: Stanford University Press.
- Thackara, J. (1988). *Design after modernism*. Thames and Hudson Inc. New York, NY.
- Tajfel, H. & Turner, J.C. (1986). The social identity theory of intergroup behavior. In Worchel, S. & Austin W.G. (eds.) *Psychology of Intergroup Relations*. (second ed.) Chicago: Nelson-Hall: 7-24.
- Tarde, G. (1989). *La logique sociale*. Paris: Les Empêcheurs de Penser en Rond.
- Thefuntheory.com. (<http://www.thefuntheory.com>)

- Thrift, N. (2006). Re-inventing invention: new tendencies in capitalist commodification *Economy and Society*, (35)2, 279 – 306
- Thrift, N. (2008). Pass it on: towards a political economy of propensity. *Emotion, Space and Society*, (1)2, 83-96
- Tiger, L. (2000). *The Pursuit of Pleasure*. New Brunswick: Transaction Publishers.
- Toscano, A. (2009). *The theater of production: philosophy and individuation between Kant and Deleuze*. London: Palgrave Macmillan.
- Turkle, S., & Couto, D. (2003). Technology and human vulnerability. *Harvard Business Review* 81 (9), 43-50. ‘User Experience’. ([https://en.wikipedia.org/wiki/User\\_experience](https://en.wikipedia.org/wiki/User_experience))
- Vallgårda, A., & Redström, J. (2007). Computational composites. *Proceedings of CHI '07. ACM*, 513 – 522.
- Van Gorp, T. ve Adams, E. (2012). *Design for Emotion*. Boston: Elsevier/ Morgan Kaufmann.
- Verbeek, P.-P. (2005). What things do – philosophical reflections on technology, agency, and design. The Pennsylvania State Press.
- Vitruvius, P. (trans. by Morgan, M.H.) (1960). *De architectura: the ten books on architecture*. New York: Courier Dover Publications.
- Vrasti W, 2009, “How to use affective competencies in late capitalism”, British International Studies Association (BISA) Annual Conference, University of Leicester, 14–16 December
- Wiberg, M. (2017). *The materiality of interaction*. Cambridge, MA: MIT Press.
- Walker, J. A., & Attfield, J. (1990). *Design history and the history of design*. Pluto Press.
- Wright, P. et al. (2004) Making sense of experience. In *Funology: from usability to enjoyment*. Dordrecht: Kluwer Academic Publishers, 43-53
- Yagou, A. (2006) Critical reflections on design and emotion, In *Proceedings of the Design Research Society International Conference: WonderGround-2006*, 1-4 November 2006, IADE, Lisbon, Portugal.
- Yerkes, R.M. & Dodson, J.D. (1998). The relation of strength of stimulus to rapidity of habit-formation. *Journal of Comparative Neurology & Psychology*, (18), 459- 482.
- Zimmerman, J. (2009). Designing for the self: making products that help people become the person they desire to be. *CHI Conference Proceedings*, (1), 395-404.