

## MARK ALAN HUGHES

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### Appointments and Positions

Professor of Practice <u>University of Pennsylvania</u> , Weitzman School of Design	7/2009 - current
Department of Landscape Architecture and Regional Planning	7/2021 - current
Department of City and Regional Planning	7/2013 - 6/2021
Department of Architecture	7/2009 - 6/2013
Founding Faculty Director, Graduate Group in Energy Policy	1/2022 - current
Founding Faculty Director, Masters Certificate in Energy M & P	9/2015 - current
Founding Faculty Director, Fels Policy Research Initiative	7/2015 - 6/2018
Founding Faculty Director, Kleinman Center for Energy Policy	7/2014 - current
Energy Efficient Buildings Hub, <u>US Department of Energy</u> Lead Investigator and Member of Executive Board	10/2010 - 6/2015
Associate Director for Policy, Markets, and Behavior	10/2010 - 6/2012
Distinguished Senior Fellow <u>University of Pennsylvania</u> , School of Arts and Sciences	9/1999 - 6/2009
<u>City of Philadelphia</u> (leave) Chief Recovery Officer,	2/2009 - 6/2009
Chief Policy Adviser to the Mayor	1/2009 - 6/2009
Founding Director of Sustainability	6/2008 - 6/2009
<u>Nutter for Mayor Campaign</u> (volunteer) Campaign Policy Director	1/2007 - 6/2007
<u>Philadelphia Daily News</u> Weekly Columnist	1/2001 - 12/2006
<u>Brookings Institution</u> Washington DC Non-Resident Senior Fellow	6/1998 - 6/2001
Vice President for Policy Development <u>Public/Private Ventures</u> , Philadelphia, PA	12/1993 - 5/1999

Visiting Associate Professor of Economics <i>Swarthmore College</i> , Swarthmore, PA	9/1993 - 6/1995
Senior Consultant and Interim Program Officer <i>The Ford Foundation</i> , Urban Poverty Program, New York, NY	1/1992 - 12/1993
Visiting Associate Professor of Public Policy <i>Harvard University</i> , Kennedy School of Government	7/1992 - 6/1993
Assistant Professor of Public and International Affairs <i>Princeton University</i> , School of Public and International Affairs	6/1986 - 1/1992

### Education

M.Arch (candidate)	<i>University of Pennsylvania</i>	2006 - 2008
Ph.D. in Regional Science	<i>University of Pennsylvania</i>	1983 - 1986
B.A in Art History and Religion	<i>Swarthmore College</i>	1977 - 1981

### Teaching

ENMG5110/EAS5110 Grand Challenges: Energy Science and Policy (Spring 2023)  
 ESCMG Energy Systems and Climate Mitigation (Spring 2021, University of Milan)  
 ENMG502 Introduction to Energy Policy (Fall 2016, 2018, 2019, 2020)  
 ENMG507 Ideas in Energy Policy (Fall 2017)  
 CPLN730 Sustainable Cities (Spring 2014, 2016)  
 ENMG502 Introduction to Policy Analysis (Fall 2015)  
 COURSERA Sustainability in Practice (Summer 2013)  
 ARCH756/CPLN756 Policy and Design (Spring 2010, 2011, 2012, 2013)  
 ARCH255-755/URBS255/ENVS255 Sustainability in Action, ABCS (Fall 2012)  
 CPLN686 Systems Thinking (Fall 2013, 2014)  
 ARCH757 Buildings and Behavior (Fall 2011)

### Recent Publications

*Interdisciplinary Approaches to Climate Change for Sustainable Growth* (co-edited with Sara Valaguzza) (New York, NY: Springer, 2022).

“Livable Cities”, *Audible Original*, audiobook [link](#) (June 2021).

UNFCCC, COP25 Meetings, Organized and moderated panel on “Climate-resilient urban infrastructure finance”, in collaboration with UNFCCC’s Nairobi Work Program, Penn IUR, and Perry World House, December 2019.

**Public Service:**

Appointed by Mayor to the 2019 Refinery Advisory Group and chaired the Environmental and Scientific Committee thereof. Organized and chaired a public forum to discuss environmental issues facing the city and its constituencies. Contributed new and collected research to the city’s final public report on the refinery’s future

Appointed by Mayor in 2008 to establish the City of Philadelphia’s first Office of Sustainability by defining a new Cabinet-level role for the Director, creating a new 20-member Sustainability Advisory Board, and attracting an outstanding staff

Designed, Funded, and Led the creation of the City’s 2015 Sustainability Framework known as Greenworks Philadelphia ([www.greenworksphila.org](http://www.greenworksphila.org)) and Engaged constituents and partners in that process in over 200 public speaking events

Organized and Led the City of Philadelphia’s Recovery Strategy to maximize the value and impact of federal funding under the ARRA of 2009 and Represented the City in negotiations with utilities and governments on Energy Policy

**Policy Development:**

<i>Comparative Pathways to Regional Energy Transition</i> to estimate local net benefits from competing policy choices facing Greater Philadelphia	2016-2018
<i>Shared Regional Energy Vision</i> to convene and mediate stakeholders in Greater Philadelphia toward a rational and equitable energy strategy	2013-2016
<i>Energy Efficient Buildings Hub</i> to reduce energy consumption in nation’s buildings through R&D with \$160 million federal contract	2011-2015
<i>Revenue Acquisition Project</i> to enhance non-local public funding by \$100 million in potential sources for Philadelphia	2003-2005
<i>Campaign for Working Families</i> expanded EITC participation by \$15 million annually in Philadelphia	2001-2002
<i>Transitional Work Corporation</i> created \$35 million annual welfare-to-work program in Philadelphia	1997-1999
<i>National Bridges-to-Work Demonstration</i> designed \$15 million access-to-jobs program evaluation in five cities	1992-1996

## Awards

<i>G. Holmes Perkins Award for Distinguished Teaching</i> , PennDesign	2014
<i>David C. Lincoln Fellowship</i> : Lincoln Institute of Land Policy Cambridge MA	2004
<i>Local Columnist of the Year Finalist</i> : <u>The Week</u> Magazine Opinion Awards	2004
<i>National Planning Award</i> , Best JAPA Article: American Planning Association	1992
<i>Graduate Students Association Teaching Award</i> : Princeton University	1992
Associate Editor for North America: <i>Urban Studies</i>	1988-92
Dissertation Award: <i>Regional Science Association</i>	1985-86

## Refereed Journal Articles

"Globalization and Residential Segregation by Race" (with Vilna Bashi) in *The Annals of the American Academy of Political and Social Science* (1997) v551:105-120.

"A Mobility Strategy for Improving Opportunity" in *Housing Policy Debate* (1995) v6:271-97.

"Employment Decentralization and Accessibility: A Strategy for Stimulating Regional Job Opportunities" in *Journal of the American Planning Association* (1991) v57:288-299.

"A Market for Exclusion: Trading Low-Income Housing Obligations under Mount Laurel III" (with Therese J. McGuire) in *Journal of Urban Economics* (1991) v29:207-217.

"Residential Segregation and the Economic Status of Black Workers: New Evidence for an Old Debate" (with Janice F. Madden) in *Journal of Urban Economics* (1991) v29:28-49.

"Social Policy through Land Reform" (with Peter VanDoren) in *Political Science Quarterly* (1990) v105:97-111.

"The Formation of the Impacted Ghetto: Evidence from Large Metropolitan Areas, 1970-1980" in *Urban Geography* (1990) v11:265-284.

"Concentrated Deviance and the 'Underclass' Hypothesis" in *Journal of Policy Analysis and Management* (1989) v8:274-281.

"Mis-Speaking Truth to Power: A Geographical Perspective on the 'Underclass' Fallacy" in *Economic Geography* (1989) v65:187-207.

"Moving Up and Moving Out: Confusing Ends and Means About Ghetto Dispersal" in *Urban Studies* (1987) v24:503-517.

## Edited Volumes

*Interdisciplinary Approaches to Climate Change for Sustainable Growth* (co-edited with Sara Valaguzza) (New York, NY: Springer, 2022).

*Penn Perspectives on the Sustainable Development Goals: Research on the Occasion of the World Urban Forum in Kuala Lumpur* (co-edited with Eugenie L. Birch and William Burke-White) (Philadelphia PA: Penn Press, 2018).

*Research in Urban Economics: Housing Trends and Conditions* (co-edited with Therese J. McGuire) (Greenwich CT: JAI Press, 1990).

## Chapters in Edited Volumes, Journal Articles, Book Reviews

“Introduction” (with Sara Valaguzza) and “How Emerging Technologies Are Finally Matching the Policy Leverage of Cities with their Political Ambitions” in *Interdisciplinary Approaches to Climate Change for Sustainable Growth* (co-edited with Sara Valaguzza) (New York, NY: Springer, 2022).

“Introduction” and Chapter 3, “Putting Energy into Implementation” (with Cornelia Colijn) in Eugenie L. Birch, William Burke-White, and Mark Alan Hughes (eds), *Penn: Current Research on Sustainable Urban Development* (Philadelphia PA: Penn Press, February 2018).

“Managing Risk in the Energyshed” in Tatum Hands, Billy Fleming and Richard Weller (eds), *LA+ Risk: An Interdisciplinary Journal of Landscape Architecture* (v6 2017).

“Book Review of *Edgeless Cities: Exploring the Elusive Metropolis* by Robert F. Lang” in *The Journal of Regional Science* (2004) v22: 370-372.

## Chapters in Edited Volumes, Journal Articles, Book Reviews (continued)

“Invited Comment on *In through the Back Door* by Scott A. Bolens” in *Housing Policy Debate* (2003) v13:669-674.

“Urban Life: Future Developments” in N. J. Smelser and Paul B. Baltes (eds), *International Encyclopedia of the Social & Behavioral Sciences* (Oxford UK: Pergamon, 2001).

“Federal Roadblocks to Regional Cooperation: The Administrative Geography of Federal Programs in Large Metropolitan Areas” in Greenstein and Weiwal (eds), *Urban-Suburban Interdependence: New Directions for Research and Policy* (Cambridge MA: Lincoln Institute for Land Policy, 2000).

“Over the Horizon: Job Deconcentration in Major Metropolitan Areas” (with Anais Loizillon) in Anita A. Summers et al. (eds), *Urban Change in the United States and Western Europe, Second Edition* (Washington DC: Urban Institute Press, 1999).

“Welfare Symposium: Learning from the ‘Milwaukee Challenge’” in *Journal of Policy Analysis and Management* (1996) v15:562-71.

"Deregulating the Government Where the Rubber Meets the Road: Transportation Administration" in John J DiIulio Jr and Gerald Garvey (eds), *Deregulating the Government* (Washington DC: Brookings Press, 1993).

"Emerging Settlement Patterns and Their Implications for Inner City Poverty in the United States" in Anita A. Summers et al (eds), *Urban Change in the United States and Western Europe* (Washington DC: Urban Institute Press, 1993).

"Antipoverty Policy Strategy Where the Rubber Meets the Road: Transporting Workers to Jobs" in Thomas Kingsley and George Peterson (eds), *Housing Markets and Residential Mobility* (Washington DC: Urban Institute Press, 1992).

"Private Property and Public Policy: Regulating Land Markets in the U.S." in Iwo Byczewski and Maria Ptaszynska-Woloczko (eds), *Land Use Management Under Different Political Systems* (Warsaw: Polish Academy of Sciences, 1989).

"Intrametropolitan Shifts in Population and Employment, 1960-1980" (with Janice Madden) in Anita A. Summers and Thomas Luce (eds) *Economic Development within the Philadelphia Metropolitan Area* (Philadelphia: U of Penn Press, 1986).

### **Selected Public Writings**

“Livable Cities”, *Audible Original* (June 2021).

“Make Your Voice Heard on What’s Next for PES Refinery”, *The Philadelphia Inquirer* op-ed, September 9, 2019.

“Philadelphia Oil Refinery explosion is a learning moment”, *The Daily Pennsylvanian* op-ed, July 21, 2019.

“After the Fire: Philadelphia’s Responsibility to the Bigger Picture”, Kleinman Center for Energy Policy op-ed, June 26, 2019.

“One Future, One Vote”, Kleinman Center for Energy Policy op-ed, May 6, 2019.

“Transforming PGW: A Sustainable Model for the Future”, Kleinman Center for Energy Policy op-ed, April 26, 2019.

“Puerto Rico’s Three Major Energy Policy Challenges”, Kleinman Center for Energy Policy op-ed, April 3, 2019.

“Can the U.S. Meet Green New Deal Emissions Targets?”, Kleinman Center for Energy Policy op-ed, February 27, 2019.

“Carnot on the Road... and Where that Road Leads Us”, Kleinman Center for Energy Policy op-ed, January 22, 2019.

With Cornelia Colijn, “The Most Damnable Non Sequitur in History”, Kleinman Center for Energy Policy op-ed, November 13, 2019.

With Cornelia Colijn and Oscar Serpell, “Comparative Pathways Interim Report”, Kleinman Center for Energy Policy, August 30, 2018.

“Beating the Authoritarian Playbook on Climate Change”, Kleinman Center for Energy Policy op-ed, August 15, 2018.

“This Year’s Carnot Prize Honors Courage Amidst Complexity”, Kleinman Center for Energy Policy op-ed, July 30, 2018.

“There is No Acceptable Alternative to Paris”, *The Philadelphia Inquirer* op-ed, June 15, 2017.

With Cornelia Colijn and Oscar Serpell, “Comparative Pathways to Regional Energy Transition”, *Policy Digest*, Kleinman Center for Energy Policy, March 31, 2017.

With Cornelia Colijn and Oscar Serpell, “Cities Can’t Lead on Climate Change”, *Bulletin of the Atomic Scientists*, 28 February 2017.

“The Stakes are High for a Philadelphia Energy Hub”, *Policy Digest*, Kleinman Center for Energy Policy, April 2015.

“A Blueprint from Boston for Making the Philadelphia Energy Hub Work”, *Philadelphia Magazine* column, March 19, 2015.

“How to Build a Bridge to Philadelphia’s Energy Future”, *Philadelphia Magazine* column, February 4, 2015.

“So What the Hell is an Energy Hub?”, *Philadelphia Magazine* column, January 14, 2015.

With Elise Harrington, “Reward Smart Energy Use”, *The Philadelphia Inquirer* op-ed, September 25, 2013.

With Elise Harrington, “Cities Make Use of Legacy Assets”, *The Philadelphia Inquirer* op-ed, May 1, 2013.

Principal author, “Economic, policy, and behavioral factors influencing building energy consumption”, extracted from *GPIC Proposal to DOE* (2010) pp1-17.

Principal author, *Greenworks Philadelphia: Five Goals and Fifteen Targets to Make Philadelphia the Greenest City in America* (2009).

Principal Author of one dozen policy papers for the 2007 Nutter Campaign, including:

“An Honest Budget: The Nutter Plan to Bring Fiscal Integrity to City Government” (Policy Paper, *Nutter for Mayor Campaign*) April 16, 2007.

“Better Transportation Now: The Nutter Plan to Get Philadelphia Moving” (Policy Paper, *Nutter for Mayor Campaign*) April 3, 2007.

“The Nutter Plan for Zoning and Planning Reform” (Policy Paper, *Nutter for Mayor Campaign*) March 1, 2007.

“The Nutter Plan for Emergency Management and Disaster Response” (Policy Paper, *Nutter for Mayor Campaign*) February 27, 2007.

“The Nutter Plan for a Sustainable Philadelphia Environment Now and Tomorrow” (Policy Paper, *Nutter for Mayor Campaign*) February 15, 2007.

“The Nutter Plan for Better Housing Now” (Policy Paper, *Nutter for Mayor Campaign*) February 12, 2007.

“The Nutter Plan for Ethics and Government Reform Now” (Policy Paper, *Nutter for Mayor Campaign*) February 1, 2007.

“The Nutter Plan for Safety Now: Ten Weeks to a Safer Philadelphia” (Policy Paper, *Nutter for Mayor Campaign*) January 15, 2007.

“Why So Little Georgism in America: Using the Pennsylvania Case Files to Understand to Understand the Slow, Uneven Progress of Land Value Taxation”, *Working Paper Series* (Lincoln Institute of Land Policy, Cambridge MA) December 2006.

Over 200 opinion columns written for the Philadelphia Daily News, including:

"Our zoning deli: just take a number", *Philadelphia Daily News* column, August 8, 2006

"Da Vinci Code" crackers", *Philadelphia Daily News* column, January 24, 2006

"Better schools: the real estate connection", *Philadelphia Daily News* column, January 10, 2006

"The best of times---for murder", *Philadelphia Daily News* column, December 6, 2005

"Eminent Domain: another juicy issue for the right", *Philadelphia Daily News* column, November 8, 2005

"Even Katrina can blow some good", *Philadelphia Daily News* column, September 13, 2005

"End of grass as we know it", *Philadelphia Daily News* column, August 30, 2005

"The Parkway's lessons for the blight fight", *Philadelphia Daily News* column, July 23, 2003

"Corrupt and contented, 100 years later", *Philadelphia Daily News* column, June 17, 2003

"Electricians union ad gave me a jolt ", *Philadelphia Daily News* column, April 22, 2003

"How a rec center can enhance civilization ", *Philadelphia Daily News* column, March 25, 2003

"Michael Nutter hit by white flight", *Philadelphia Daily News* column, February 18, 2003



"Why tolerance needs order", *Philadelphia Daily News* column, December 3, 2002

"How would you label City Hall's portals? ", *Philadelphia Daily News* column, July 30, 2002

"Philadelphia, in three easy pieces", *Philadelphia Daily News* column, June 11, 2002

"Earthquake in L.A.", *Philadelphia Daily News* column, May 7, 2002

"LOVE Park and the art of governing", *Philadelphia Daily News* column, April 23, 2002

"City Trusts need busting", *Philadelphia Daily News* column, December 11, 2001

"In pursuit of rich folks", *Philadelphia Daily News* column, November 13, 2001

"Let Philadelphia go: undo the Consolidation of 1854", *Philadelphia Daily News* column, July 25, 2000

"Let Philadelphia Go" in the *Regional Review* (Pennsylvania Economy League, Philadelphia PA) October 2003.

*Don't Hold Your Breath: Greater Philadelphia Faces the Threat of Bioterrorism* (with Donna Gentile O'Donnell) Institute for Strategic Threat Analysis and Response, University of Pennsylvania (Philadelphia PA) August 2002.

*Philadelphia Briefing Book for 2000 Republican National Convention* (with Terry Gillen) Philadelphia News Project of the Pew Charitable Trusts (Philadelphia PA) July 2000.

"Dirt into Dollars: Vacant Property Policy in U.S. Cities" in *The Brookings Review*, (Brookings Institution, Washington DC) Summer 2000.

"Getting There: Welfare Reform and Transportation" (with Margy Waller) cover story in *The New Democrat* (September/October 1999).

*Working Far from Home: Transportation and Welfare Reform in the Ten Big States* (with Margy Waller) Progressive Policy Institute (Washington DC), August 1999.

"City needs a fresh approach to dealing with vacant property", *The Philadelphia Inquirer* op-ed, May 23, 1999

*Vacancy Reappraised: Critical Issues Facing Philadelphia's Neighborhoods* (with Rebekah Cook-Mack) CPR Report #5, (Philadelphia PA: Public/Private Ventures) May 1999.

"Philadelphia must seize reins of its runaway decline", *The Philadelphia Inquirer* op-ed, May 7, 1998

*Building Revival: Critical Issues Facing Philadelphia's Neighborhoods* (with Anais Loizillon), CPR Report #2, (Philadelphia PA: Public/Private Ventures) May 1998.

“Job Access Programs Require More Than Just Turning the Key”, in *Community Transportation*, August 1997.

"Philadelphia, state should strike deal to make welfare reform work", *The Philadelphia Inquirer* op-ed, May 14, 1997

*Welfare Reform: Critical Issues Facing Philadelphia's Neighborhoods*, CPR Report #1, (Philadelphia PA: Public/Private Ventures) May 1997.

"Facing the welfare-reform storm: Philadelphia better start bailing", *The Philadelphia Inquirer* op-ed, December 16, 1996.

"Welfare Dust Bowl", *The Washington Post* op-ed, September 25, 1996.

“A Mobility Strategy Offers Real Choices” in *Shelterforce* (Orange NJ: National Housing Institute) March/April 1994.

"Restoring Opportunity to America's Cities" (with Thomas Kingsley and George Peterson) in *Public Welfare* (Washington DC: American Public Welfare Association) April 1993.

*The New Metropolitan Reality: Where the Rubber Meets the Road in Antipoverty Policy*, (Washington DC: Urban Institute Press) December 1992.

## **Supported Research Projects**

Anonymous, “Kleinman Center for Energy Policy”, \$30 million Term Endowment Gift to perpetuate a research center at the University of Pennsylvania Stuart Weitzman School of Design.

Scott and Wendy Kleinman, “Kleinman Center for Energy Policy”, \$10 million 5-Year Term Gift to the University of Pennsylvania to establish and operate new research center at PennDesign.

Carl Goldsmith, “Decision Making Under Deep Uncertainty”, \$500,000 Gift to the Kleinman Center for Energy Policy, 2017.

U.S Department of Energy, “Energy Efficient Building Hub”, Years One-Five Sub-Contracts, Feb 2011-Jan 2016, \$7.4 million to the University of Pennsylvania.

The Pew Charitable Trusts, “Enhancing Immigrant Political Participation in Philadelphia”, January-March 2006, \$25,000.

Lincoln Institute of Land Policy, “Why So Little Georgism in America: Using the Pennsylvania Case Files to Understand to Understand the Slow, Uneven Progress of Land Value Taxation”, January 2005-December 2005, \$35,000.

The William Penn Foundation, “Revenue Acquisition Project for the City of Philadelphia”, February 2004-July 2005, \$375,000 to the University of Pennsylvania.

The Pew Charitable Trusts, “Making Work Pay through the Earned Income Tax Credit”, March 2002-September 2003, \$534,000 to the University of Pennsylvania.

Franklin Heath Trusts, “Regional Readiness on Bio-Chemical Terrorism”, September 2001-August 2002, \$60,000 to the University of Pennsylvania.

The William Penn Foundation, “Vacant Property Inventory and Analysis”, September 1998-August 1999, \$250,000 to Public/Private Ventures.

The Pew Charitable Trusts, “Community Policy Research”, September 1996-March 2000, \$750,000 to Public/Private Ventures.

Ford Foundation, MacArthur Foundation, Pew Charitable Trusts, and U.S.H.U.D., "Bridges to Work Demonstration", June 1996-December 2000, \$13,000,000 to Public/Private Ventures.

Ford Foundation, MacArthur Foundation, Rockefeller Foundation, and Pew Charitable Trusts, "Mobility Strategy Demonstration Development", July 1993-June 1996, \$1,500,000 to Public/Private Ventures.

Ford Foundation, "Mobility Reconnaissance", December 1992-February 1993, \$75,000 to Public/Private Ventures.

Ford Foundation, "Mobility Strategies Conference", September 1992-January 1993, \$75,000 to the Urban Institute. Ford Foundation, "Antipoverty Policy Where the Rubber Meets the Road" February 1992-June 1992, \$40,000 to the Urban Institute.

Wisconsin Policy Research Institute, "Concentrated Poverty in Milwaukee" September 1991-January 1993, \$16,500 to Princeton University.

U.S. Department of Transportation, "Dynamic Land Use and Transportation Processes and Their Impact on Growth Management and Job Access" (with Julian Wolpert) September 1989-August 1991, \$146,000 to Princeton University.

Rockefeller Foundation, "Perspectives on the 'Underclass'" (with Richard Nathan) June 1987-January 1988, \$49,000 to Princeton University.

### **Selected Conference Presentations**

UNFCCC, COP25 Meetings, Organized and moderated panel on “Climate-resilient urban infrastructure finance”, in collaboration with UNFCCC’s Nairobi Work Program, Penn IUR, and Perry World House, December 2019.

DMDU Society Workshop. Organized and moderated panel on “DMDU in Energy Policy Making at Multiple Scales”, Delft, Netherlands, November 2019.

Rapid Switch Workshop. Business and Financial Bottlenecks. Princeton University, May 2019.

REACT@Penn 2019. Policy, Technology and Science for Global Challenges, University of Pennsylvania, January 2019.

DMDU Society Workshop. Using DMDU to Prepare for Energy Transition in the Philadelphia Region, Culver City, November 2018.

World Urban Forum. Putting Energy into Implementation: Challenges to Subnational Participation in SDG 7. Malaysia, February 2018.

Decision Making under Deep Uncertainty Annual Workshop, Oxford University's Martin School, November 2017.

Achieving Deep Carbon Reductions: Pathways for Pennsylvania, Carnegie-Mellon University, March 2017.

New Urban Agenda, U.N. Habitat 3, Quito Ecuador, October 2016.

European Energy Policy Annual Conference, MIT and EDF, Paris France, July 2016.