

SYMPOSIUM

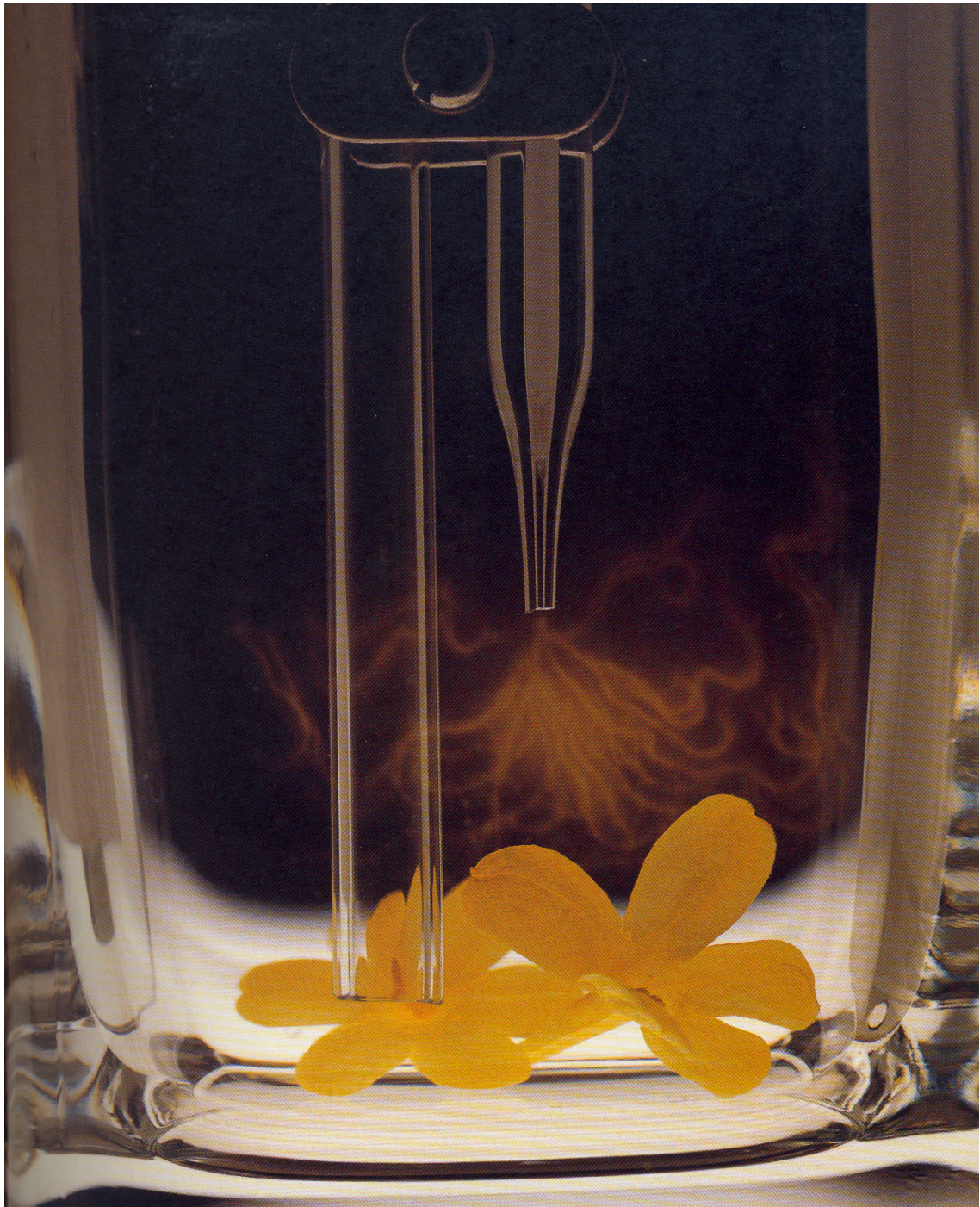
FOLLOW YOUR NOSE!
ON SMELL

Einstein Forum, May 3, 2012

Chair: Dominic Bonfiglio



**EINSTEIN
FORUM**



Measuring the fragrance of jasmine petals.

(Page 1: Advertisement for Nina Ricci's perfume Coeur-Joie, 1946)

Dominic Bonfiglio
Follow your Nose! – On Smell

Of all the senses, the modern relationship to smell is typically the most ambivalent. Strong odors can literally make us retch, but they also count among the world's most powerful seducers. They can indicate danger, or tell us we're home. Though smells are everywhere, both near and far, we often neglect them in our everyday lives—that is, until a chance whiff recalls a love long lost, activates the appetite, or sends us running in the opposite direction. Historically speaking, we live in a thoroughly deodorized society, and still we spend billions on perfume and household scents, not just to cover up undesirable odors but to replace those we've eliminated.

With few exceptions, past philosophers and psychologists have devalued the importance of smell—Aristotle called it the least useful of the senses and Freud thought it atavistic—but we now know the reverse is true: researchers have found that the loss of smell can cause severe depression, taking from us simple everyday pleasures and weakening the bonds of intimacy with others. Yet though smell is an indispensable part of sensory experience, we seem to suffer from a scarcity of olfactory awareness.

To provide some answers why, and to buck the historical trend, the Einstein Forum has placed smell first in its series on the senses. "Follow Your Nose" approaches olfaction from a multitude of perspectives—historical, scientific, philosophical, practical, and economical. How do we smell? Which qualities make odors so hard to grasp? How have human attitudes to smell changed over time? Why are scents so polarizing? How do we learn to distinguish between good smells and bad? How is smell interconnected with memories, emotions, and the other senses? Do smells still affect us even when we are unconscious of them? Why is smell at once so evocative and so mysterious?

Speakers
Abstracts and CV

Molly Birnbaum

Writer, Cambridge, Mass.

In Search of Smell

Smell is a quiet sense, one often overlooked in favor of sight, sound, taste, and touch. But scent is a powerful tool in experiencing the day-to-day, allowing us to perceive the flavor of roast chicken, to recognize familiar people and places, to resuscitate events from our past. So what happens if it disappears?

I lost my sense of smell when I was hit by a car one morning in 2005. I had been training to be a chef at the time, but the loss affected far more than my work in the professional kitchen. I will speak about my loss, this invisible but vast emptiness that scent once filled. Anosmia, or the clinical name for the loss of scent, affects the ability to taste. It affects memory and emotion, dating and sex. It is understudied and often misunderstood. But it affects a surprisingly large number of people all over the world. I will also speak about the journey that was inspired by my loss. I went on a quest to find people who understood what, exactly, was happening in my body and my brain when I lost my sense of smell – and when I began, very slowly, to gain it back, one scent at a time. I came to understand the intricacies and power of the sense of smell through the lens of my loss. My journey led me around the globe, where I met chefs, perfumers, scientists, and doctors. I also met many anosmics, who, like me, wanted to know: what does it mean to smell?

Molly Birnbaum was born in Boston, raised in its outskirts, and attended Brown University, where she studied art history and architecture but fell in love with cooking and food. Her plan to become a chef was stymied, however, when she lost her sense of smell in an accident. She began to

write for *The New York Times*, *ARTnews*, the *New York Post*, and *USA Today*, among other publications. She was awarded the Pulitzer Traveling Fellowship for Arts and Culture from the Columbia University Graduate School of Journalism in 2008. Today, she works as an associate editor for the public television show *America's Test Kitchen*—and can smell almost everything again.

Mark Buxton

Perfumer, Paris

The Independent Perfumer

From an outsider's perspective, perfume making has long been considered mysterious, a secret practice among a handful of initiates, more akin to alchemy than art or chemistry. But over the last decade, as the independent perfume market has expanded and connoisseurship has spread, people have taken greater interest in the craft. This talk throws open the curtains that have concealed—sometimes intentionally—the profession. How does one become a perfumer? What does the work involve? How do perfumers think and smell? How do they judge their creations?

Mark Buxton was born in Derby, England. When he was eight, his family moved to Germany, where he completed school and began studies in geology. In 1985 he enrolled at the perfume school of Haarmann & Reimer, in Holzminden. In 1988 he relocated to Paris, and in 1997 he joined the company Creations Aromatiques (known as Symrise after 2003). In 2011 he founded his own company (Mark Buxton Perfumes/Perfarium), and for 2012 he plans to open a niche boutique in Paris. Buxton has created perfumes for the world's most renowned fragrance and fashion houses, including Givenchy, Jil Sander, Joop, Paco Rabanne, Versace, and Van Cleef & Arpels. About Buxton's fragrance 2 Man, for Comme des Garçons, the perfume critic of *The New York Times* wrote, "This perfume is not just extraordinary. It is perfect."



"The Origin of Perfumes". Engraving, Simon Barbe, 1699.

Patrick Hehn

Consultant, Göttingen; lecturer in scent marketing, Harz University of Applied Sciences, Wernigerode

Euros and Scents: On Using Odors in Marketing

We breathe around 23,000 times a day, and with every breath we smell things in our surroundings, even when shopping or using the products we buy. To what extent are consumers affected by scent? In my talk I will provide insight into the usage of odors in marketing, explaining the effects of scents on well-being, on appraising and perceiving products, and on memory. In journeying through this invisible world I present an assortment of scent applications and interesting research findings.

Patrick Hehn studies the behavioral impact of scents in science and industry. He works closely with isi GmbH in Göttingen, a market research company specialized in sensory marketing, and he is a lecturer in scent marketing at the Harz University of Applied Sciences in Wernigerode.

Tim Jacob

Professor, School of Biosciences, Cardiff University

Smell: A Tricky Sense

Smell is a duplicitous sense, simultaneously straightforward and mysterious. First it tells us the toast is burning and then it resurrects faint recollections from childhood. From our distant ancestors we have acquired hardwiring to certain smells and our response to them is reflexive but to many others we learn a response that includes the emotions, memory, and the endocrine system. The more we understand about our sense of smell, the more we have to redefine its true function. In popular belief it is a warning system: bad smells indicate spoiled food, gas leaks, and other hazards. But while the existence of bad smells is easy to explain, there is, to date, no satisfactory biological reason for good smells. It may be that our very survival depends upon our ability to distinguish between “good” genes and “bad” genes, and it appears we do this by smell.

Tim Jacob earned a degree in biochemistry from Sussex University and a Ph.D. in biophysics from the University of East Anglia. His research interests include smell acquisition, smell's effect on behavior, smell hedonics, psychophysiological responses to smell, olfactory function measurement, pheromones, and smell's contribution to flavor. He has written or contributed to over 75 papers, which have appeared in journals such as *Physiology and Behavior*, *Neuropsychopharmacology*, *Clinical Neurophysiology*, *Journal of Physiology*, and *Chemical Senses* and in books such as *Signals and Perception* (2002) and *Art and the Senses* (2011). Outside his research, he maintains leading websites on smell and taste and frequently contributes to radio and TV. His work has been funded by the Medical Research Council, the Wellcome Trust, and the Royal Society.

Chantal Jaquet

Professor of Philosophy, University of Paris 1 Panthéon-Sorbonne

Is an Olfactive Aesthetic Possible?

Despite the efforts of perfumers and the increasing popularity of the independent market, perfume making does not rank among the fine arts. This prompts a fundamental question: can perfume provide genuine aesthetic pleasure or is its purpose entirely that of deodorization and seduction? In other words, can we talk about the composition of perfumes in terms of artistic creation and olfactive beauty? To answer this question I analyze the philosophical obstacles that have prevented perfume from being considered an artistic creation and see whether they can be overcome. Then I examine the contemporary artistic practices that seek to mobilize our sense of smell. I conclude by offering some thoughts on whether we can legitimately speak of an art of the nose.

Chantal Jaquet is a Professor of Philosophy at the University of Paris I, Panthéon-Sorbonne. Her fields of research include the history of modern philosophy, ethics, and the philosophy of body, particularly in Spinoza's thought. She is a member of the Centre d'Histoire des Systèmes de Pensée Moderne de Paris I and the Institut d'histoire de la pensée classique, and is editor of the journal *Philonsorbonne*. Her main publications are *Le Désir* (1991), *Sub specie aeternitatis: Étude des concepts de temps durée*

et éternité chez Spinoza (1997), *Spinoza ou la Prudence* (1997), *L'unité du corps et de l'esprit: Affects, actions passions chez Spinoza* (2004), and *Les expressions de la puissance d'agir chez Spinoza* (2005). In 2010, she took her research in a new direction with *Philosophie de l'odorat*, the first book-length work devoted entirely to the philosophy of smell.

Sissel Tolaas

Artist, Berlin

21/21: The Fear of Smell—the Smell of Fear

In 2006 Sissel Tolaas created the exhibit *21/21: The Fear of Smell—the Smell of Fear* for MIT's List Visual Arts Center. It featured the sweat smell of 21 men who suffered from severe phobia. The men had been asked to insert a special device into their armpits whenever they experienced acute fear. From these samples Tolaas chemically synthesized the smell of each man's sweat and injected it into a special paint that, once dry, would emit the scent when rubbed.

For the Einstein Forum's symposium *Follow Your Nose*, Tolaas will present one of the scents from *21/21*. Her talk examines the tendency to see scents as either good or bad, and challenges us to rethink old prejudices about what "we cover up" and "deodorize." Afterward, the public will be invited to approach a scratch-and-sniff wall and experience the smell of fear themselves.

Sissel Tolaas grew up in Iceland and Norway. She studied mathematics, chemical science, linguistics, languages, and visual art. Since 1990 she has worked as a scent researcher and olfactory provocateur. Her Berlin lab contains a smell archive of 7,800 scents—from that of rotting bananas and sweat to that of toys and butchery. She has collaborated on projects with clients such as Cartier, Louis Vuitton, Estée Lauder, BBC Imagineering, Sony Computer Science Lab, International Flavors and Fragrances, and the Mercedes Future Lab. Tolaas's work has been shown at the world's leading art museums, including the Louisiana Museum of Modern Art, the Tate Gallery Liverpool, and Hamburger Bahnhof in Berlin. Her 2004 show at New York's Museum of Modern Art presented an olfactory map of Berlin, with distinct smells meant to evoke the essence

of various city districts. In 2011 she created an exhibit for Dresden's Military History Museum simulating the smell of the trenches during World War I.

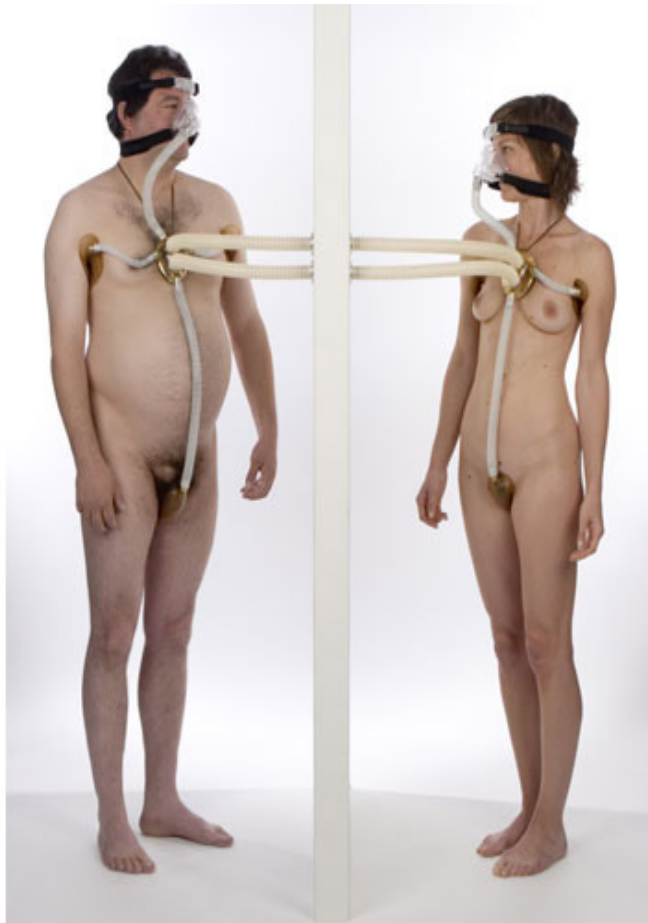
Luca Turin

Visiting Scientist, Alexander Fleming Research Center, Vari/Greece

Molecular Music

Olfaction, like hearing and color vision, appears to be a spectral sense: what we smell are the chords made by molecules when they vibrate. In my lecture I will give a brief account of the science behind this idea, and explore whether useful connections and analogies can be made between smell, color, and sound, and better still between perfume, visual art, and music.

Luca Turin was educated in France and the UK, and holds a Ph.D. in physiology and biophysics from the University of London. From 1982 to 1992 he was a tenured staff member at France's National Centre for Scientific Research, and worked at the Villefranche Marine Station and the Pasteur Institute. In 1992 he was appointed Lecturer in Biophysics at the University College London and later served as CTO of a molecule discovery startup and a visiting scientist at the Massachusetts Institute of Technology. He currently heads the Quantum Biology lab at the Alexander Fleming Research Center in Vari, Greece, where he works on the biophysics of smell in fruit flies. In addition to his academic work, Turin has written extensively on olfaction and perfume, including *The Secret of Scent* (2006) and, with Tania Sanchez, *Perfumes: The Guide* (2008). His "Duftnote," a monthly column on scent for NZZ Folio, ran from 2003 to 2010.



“Smell Blind Date,” installation, James Augur, 2008

Program

10.00

Susan Neiman, Einstein Forum
Welcome

Dominic Bonfiglio, Einstein
Forum
Introduction

10.30

Tim Jacob
Professor, School of Biosciences,
Cardiff University
Smell: A Tricky Sense

11.45

Luca Turin
Visiting Scientist, Alexander
Fleming Research Center,
Vari/Greece
Molecular Music

12.45

Lunch Break

14.30

Mark Buxton
Perfumer, Paris
The Independent Perfumer

15.30

Sissel Tolaas
Artist, Berlin
*21/21: The Fear of Smell – the
Smell of Fear*

16.30

Chantal Jaquet
Professor of Philosophy, Univer-
sité Paris I, Panthéon-Sorbonne
*Is an Olfactive Aesthetic
Possible?*

17.45

Patrick Hehn
Consultant, Göttingen; lecturer
in scent marketing, Harz Univer-
sity of Applied Sciences,
Wernigerode
*Euros and Scents: On Using
Odors in Marketing*

19.00

Molly Birnbaum
Writer, Cambridge, Mass.
In Search of Smell

Wine Reception

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