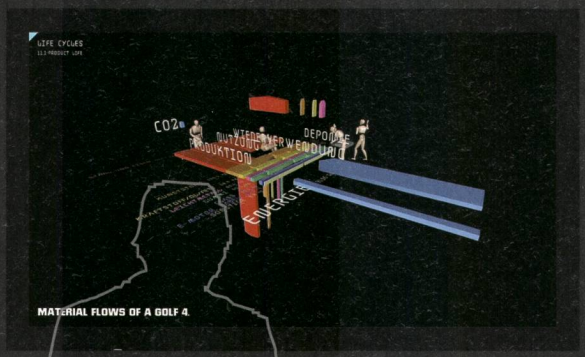
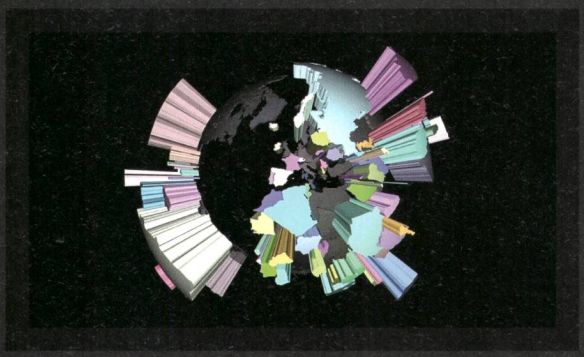
Mobiglobe

MOBIGLOBE

GLOBAL PHENON

by Hosoya Schaefer Architects





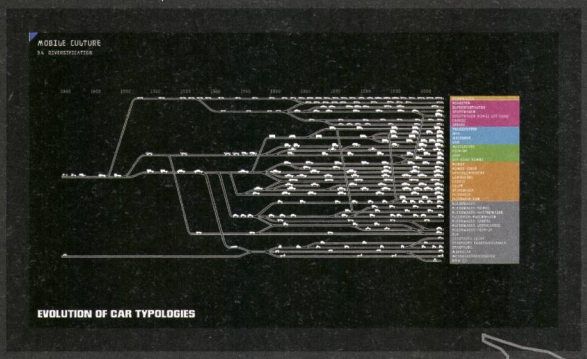
FRONTSCREEN: LCD Wall Display Screen

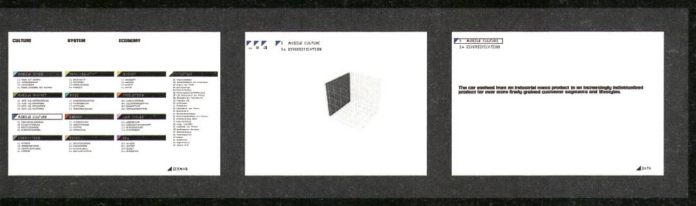
DASHBOARD: Three touch screens

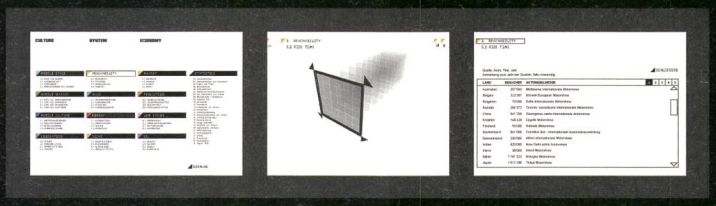
TS1: Theme selection TS2: Topic navigation TS3: Text and data info

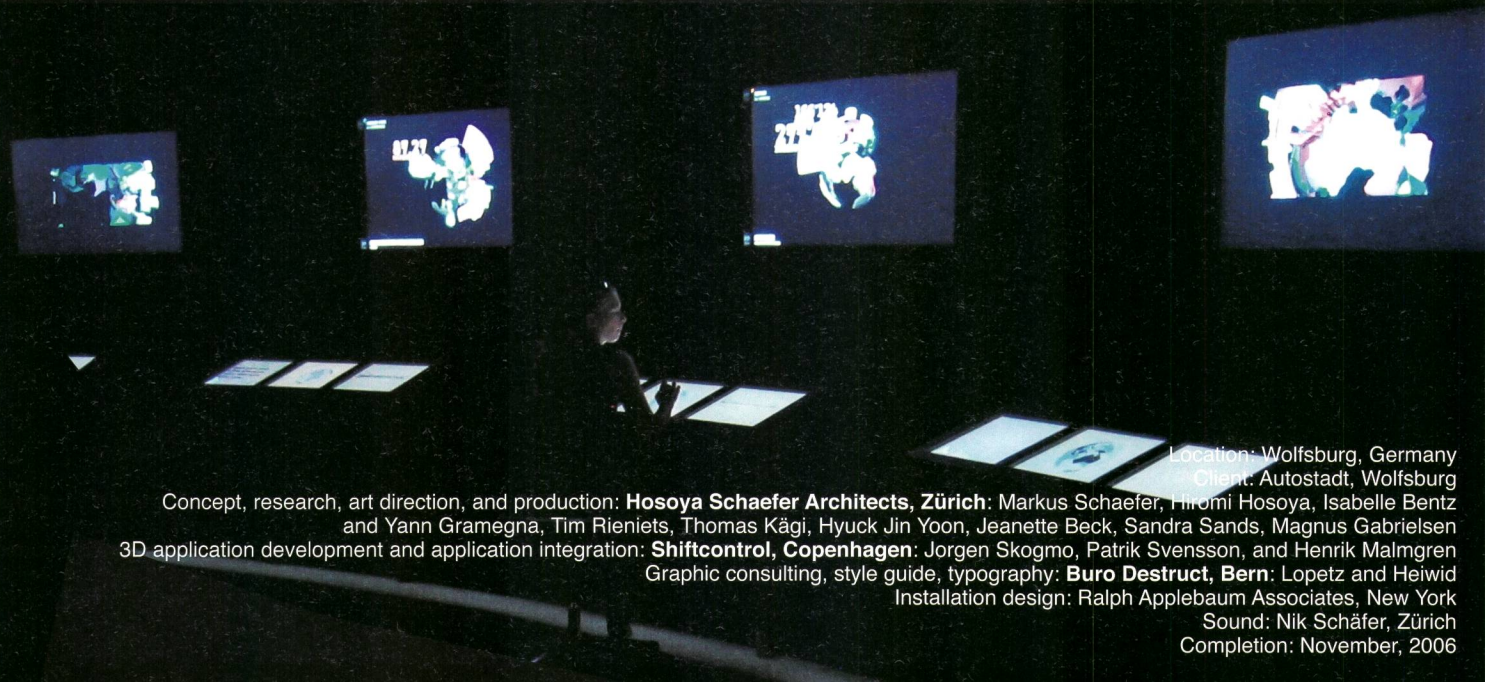
Mobiglobe is a research project and media installation for Autostadt in Wolfsburg, the theme park, and communications platform of the Volkswagen Group. The installation, created by Hosoya Schaefer Architects in Zürich in collaboration with Shiftcontrol, Copenhagen, and Buro Destruct Berne, shows topics of auto-mobility in a wide range of areas from ‘highway city’ to ‘oil world.’ With interactive, three-dimensional data graphics driven by a game engine, the installation aims to convey the contemporary dilemma between increasing comfort, freedom and safety in the individual experience of a car on the one hand, and the increasingly problematic urban and global effects on the other, especially when faced with new demands in emerging countries.

NA OF AUTOMOBILITY

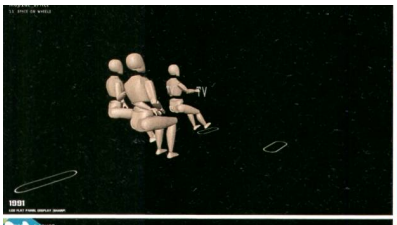


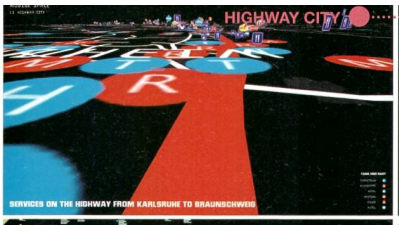




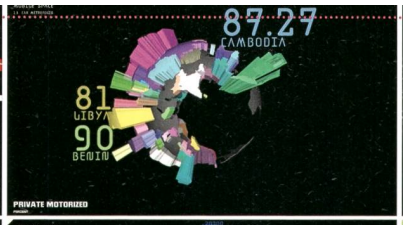


Location: Wolfsburg, Germany
Client: Autostadt, Wolfsburg
Concept, research, art direction, and production: **Hosoya Schaefer Architects, Zürich**: Markus Schaefer, Hiromi Hosoya, Isabelle Bentz and Yann Gramegna, Tim Rieniets, Thomas Kägi, Hyuck Jin Yoon, Jeanette Beck, Sandra Sands, Magnus Gabrielsen
3D application development and application integration: **Shiftcontrol, Copenhagen**: Jorgen Skogmo, Patrik Svensson, and Henrik Malmgren
Graphic consulting, style guide, typography: **Buro Destruct, Bern**: Lopetz and Heiwid
Installation design: Ralph Applebaum Associates, New York
Sound: Nik Schäfer, Zürich
Completion: November, 2006

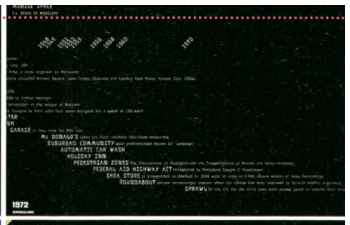

1991

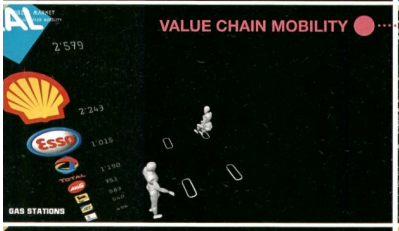


SERVICES ON THE HIGHWAY FROM KARLSRUHE TO BRAUNSCHWEIG

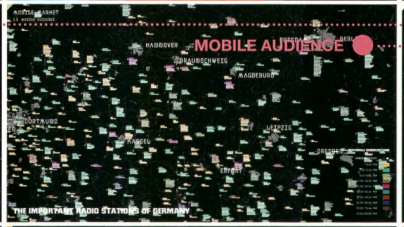


PRIVATE MOTORIZED

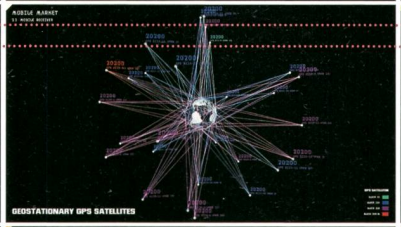

1972



GAS STATIONS



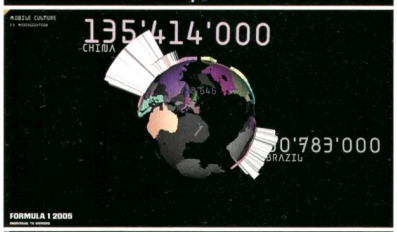
THE IMMEDIATE RADIO STATIONS OF GERMANY


GEOSTATIONARY GPS SATELLITES

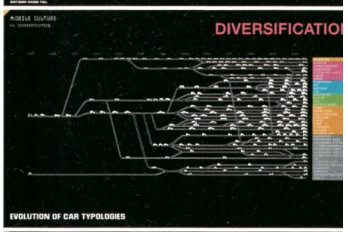

2005

INDIVIDUAL CONFIGURATIONS FOR A GOLF A5, 2007

AUTOMOBILE MUSEUMS

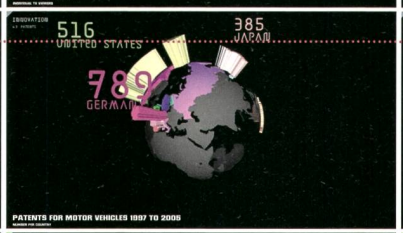


FORMULA 1 2005

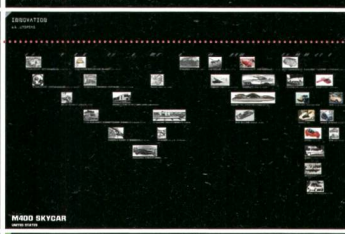


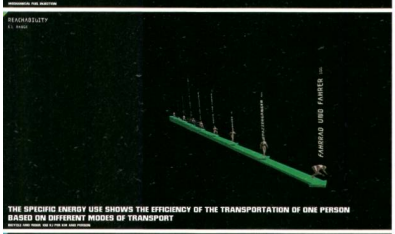
EVOLUTION OF CAR TYPOLOGIES


CASE STUDIES OF INTEGRATED AND SUSTAINABLE TRAFFIC PLANNING IN CITIES

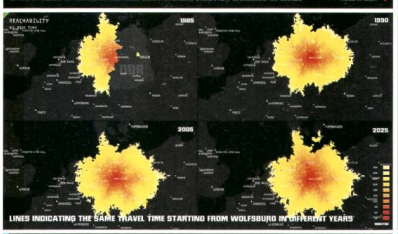


PATENTS FOR MOTOR VEHICLES 1997 TO 2006

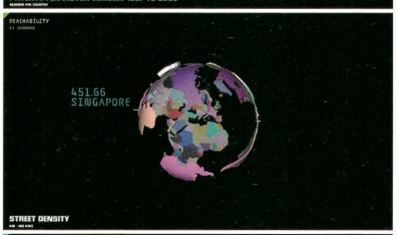

M400 SKYCAR



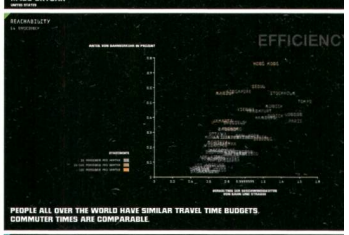
THE SPECIFIC ENERGY USE SHOWS THE EFFICIENCY OF THE TRANSPORTATION OF ONE PERSON BASED ON DIFFERENT MODES OF TRANSPORT



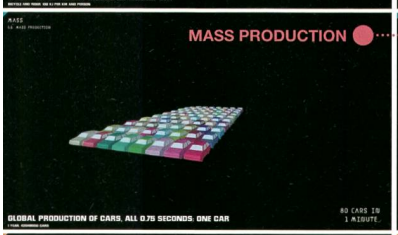
LINES INDICATING THE SAME TRAVEL TIME STARTING FROM WOLFSBURG IN DIFFERENT YEARS



STREET DENSITY

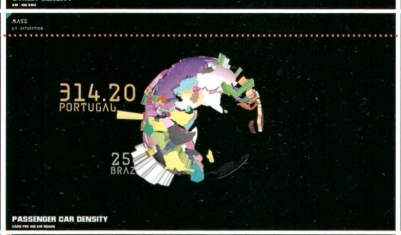


PEOPLE ALL OVER THE WORLD HAVE SIMILAR TRAVEL TIME BUDGETS. COMMUTER TIMES ARE COMPARABLE.

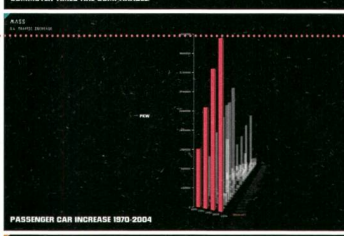


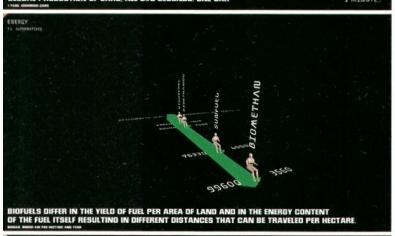
GLOBAL PRODUCTION OF CARS. ALL 0.75 SECONDS. ONE CAR

PARKING AREA IN THE CENTRAL BUSINESS DISTRICTS OF GLOBAL CITIES

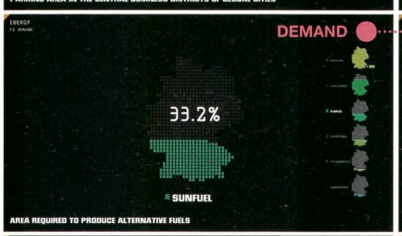


PASSENGER CAR DENSITY


PASSENGER CAR INCREASE 1970-2004

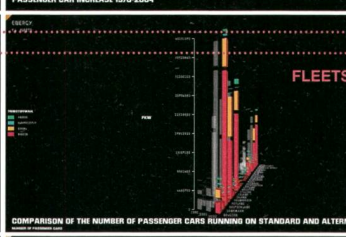


BIOFUELS DIFFER IN THE YIELD OF FUEL PER AREA OF LAND AND IN THE ENERGY CONTENT OF THE FUEL ITSELF RESULTING IN DIFFERENT DISTANCES THAT CAN BE TRAVELED PER HECTARE.

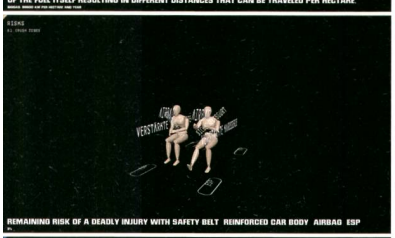


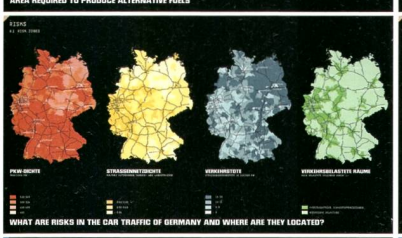
AREA REQUIRED TO PRODUCE ALTERNATIVE FUELS

SOLAR ENERGY

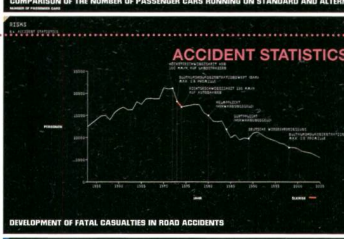


COMPARISON OF THE NUMBER OF PASSENGER CARS RUNNING ON STANDARD AND ALTER

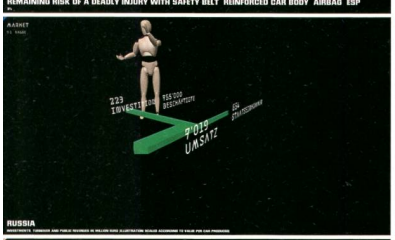

REMAINING RISK OF A DEADLY INJURY WITH SAFETY BELT REINFORCED CAR BODY AIRBAG ESP


WHAT ARE RISKS IN THE CAR TRAFFIC OF GERMANY AND WHERE ARE THEY LOCATED?

MANUFACTURING INDUSTRIES AND CONSTRUCTION

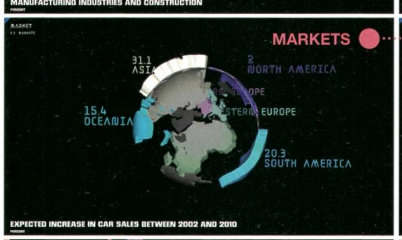


DEVELOPMENT OF FATAL CASUALTIES IN ROAD ACCIDENTS

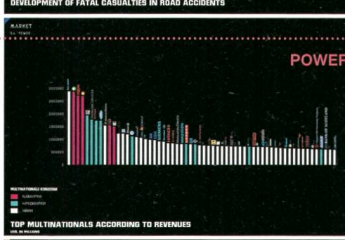


RUSSIA

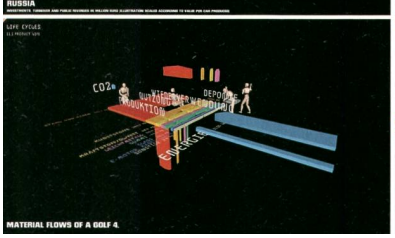
BRAND CONGLOMERATES



EXPECTED INCREASE IN CAR SALES BETWEEN 2002 AND 2010

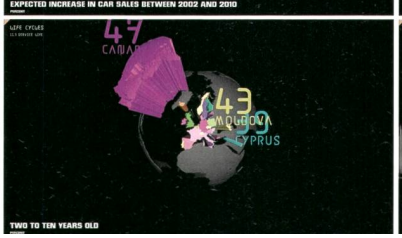


TOP MULTINATIONALS ACCORDING TO REVENUES

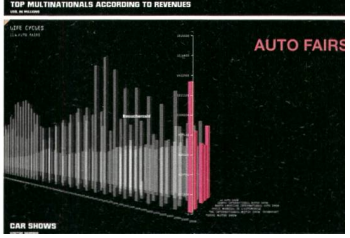


MATERIAL FLOWS OF A GOLF 4.


THE SHIPPING ROUTES OF USED CARS FROM GERMANY TO COUNTRIES IN THE THIRD WORLD.



TWO TO TEN YEARS OLD



CAR SHOWS

MOBILE SPACE

MOBILE MARKET

MOBILE CULTURE

INNOVATION

REACHABILITY

MASS

ENERGY

RISKS

MARKET

LIFE CYCLES

FROM INDIVIDUAL EXPERIENCE TO GLOBAL EFFECTS

The topics are organized in three large chapters (culture, economy and system) and twelve themes ranging from mobile space to fuel. Each theme again is examined in the scale of the car, the region, the world and time. Throughout the themes, the project intends to show the link between individual experience and global effects.

Since its invention the car has always been about more than just movement. The automobile and auto-mobility have brought about a whole range of phenomena that, to a large extent, define our society.

Mobility not only makes space accessible, it also creates its own spaces. The increase in everyday mobility has transformed the automobile and its infrastructure into parallel universes at the scale of the car, the streetscape or the highway city. Like a marketplace, the car is at the intersection of diverse value chains and information flows.

Yet the car's technological basis has hardly changed since its inception. The car evolved from an industrial mass product to an increasingly differentiated product for ever more finely grained consumer segments and lifestyles. However, the one product in human history that has most profoundly affected our personal reach and urban environment has at the same time never undergone a radical reinvention.

Enabled by industrialization and mass consumption, the car plays a central role in our culture. It is a product for conspicuous consumption and for many represents the very progress in culture and technology.

In many places in the world, life without a car is not thinkable or worse, as in the large suburban developments in the industrialized nations, not possible.

While cars are getting more secure, comfortable and attractive for individuals, on a global level auto-mobility reaches its limits. Global risks, like climate change and peak oil, are becoming apparent.

While resources and spaces are becoming scarce, there are nine multinational car companies and nine oil corporations among the sixty largest companies, by turnover, in the world.

Even though large oil reserves remain, demand shows no sign of slowing its exponential growth. And although shrinking reserves make the search for alternative fuels increasingly urgent, the oil dependency only grows more acute. Conflicts are certain to arise once decreasing reserves meet increasing demands.

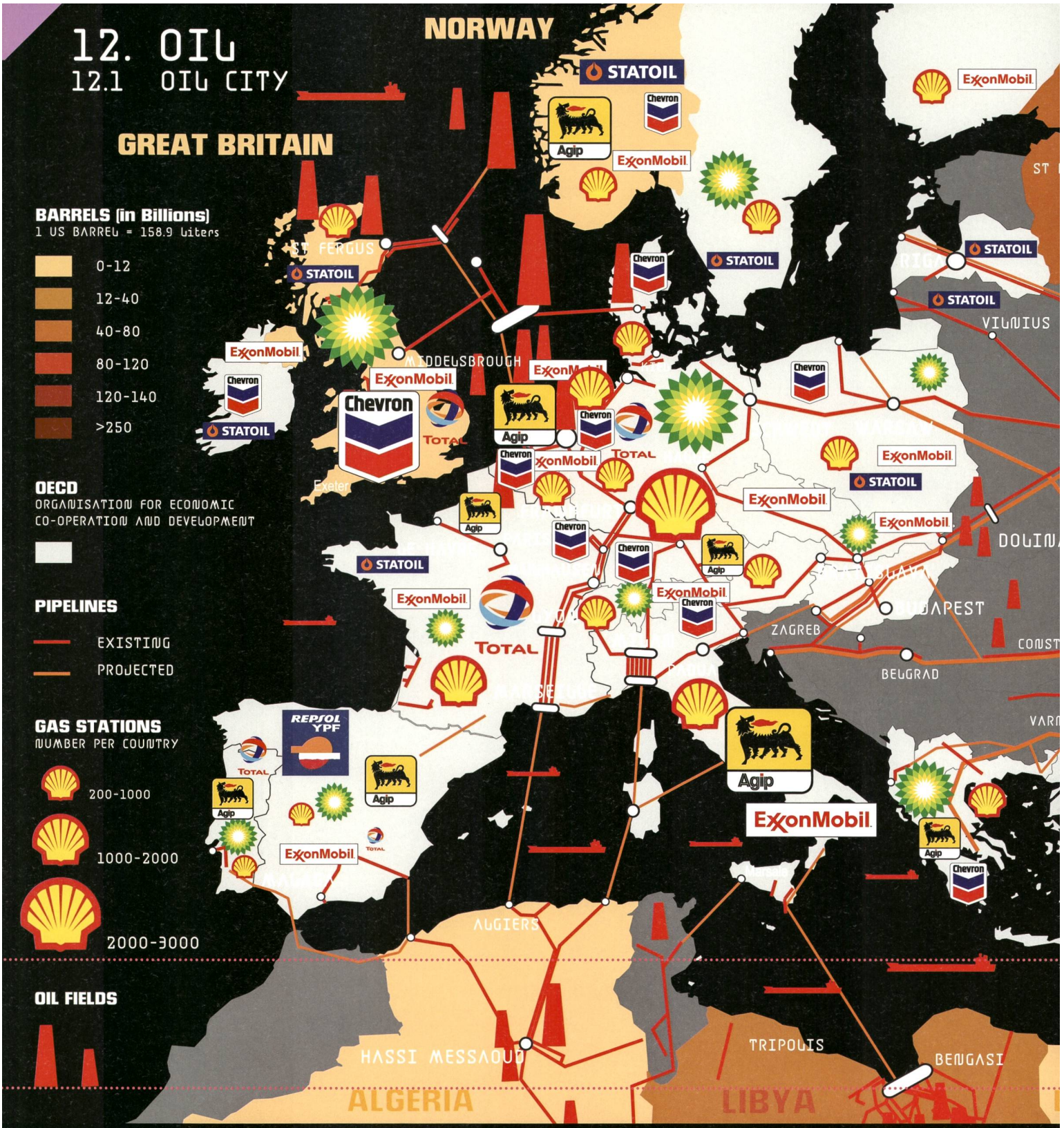
Alternative fuels do not yet provide the efficiencies to be an effective replacement for fossil fuels nor are they widely used.

In order for individual mobility to retain the role it has today, mobility needs to be reinvented fundamentally. New efficiencies, multi-modal transport systems, energy sources, behaviors and cultural values need to be developed, especially when faced with the huge potential demands in emergent economic powers like China and India.

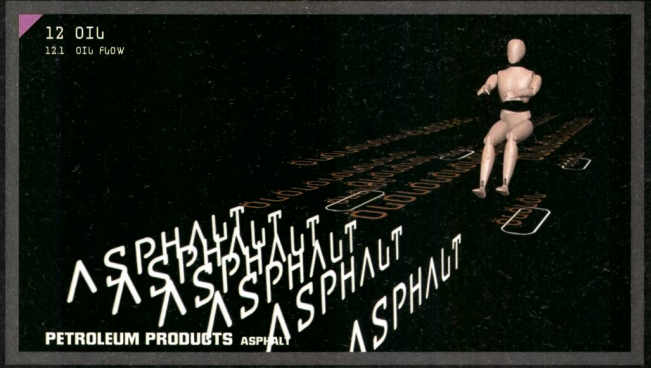
For cities to function, access to resources, jobs, ideas or people is essential. It is critical to envision a future where access is provided by spatial and programmatic density more than by ever increasing levels of individual mobility.

12. OIL

12.1 OIL CITY

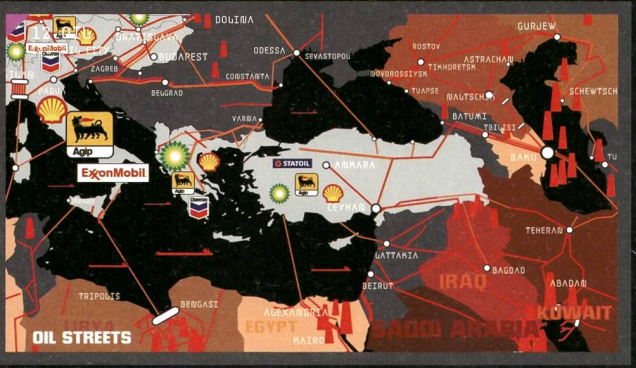


OIL FLOW



Cars are dependent on oil not only for fuel, but as an essential ingredient in synthetic products, like tires or gaskets, plastics or lubricants.

OIL CITY



The vast infrastructure of oil and gas pipelines now serving the EU has taken on almost urban proportions. The EU aims to keep the energy supply stable with additional investments in infrastructure, international agreements, and political work.

RUSSIAN FEDERATION

RYBINSK

PERM

KAZAN

MOSCOW

SAMARA

GURJEW

ROSTOV

SEVASTOPOL

ASTRACHAN

TIKHORETSK

NOVOROSSIYSK

TUAPSE

SCHEWTSCHENKO

NALTSCHIK

BATUMI

TBILISI

BAKU

TURKMENBASHI

STATOIL

ANKARA

CEYHAN

TEHERAN

LATTAKIA

BAGDAD

IRAQ

IRAN

BEIRUT

ABADAN

KUWAIT

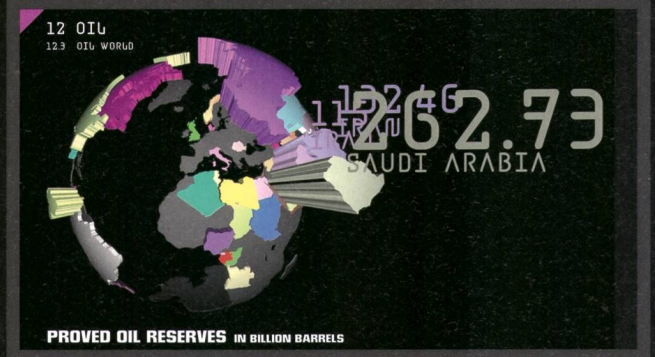
SAUDI ARABIA

While there are different estimates when we will run out of oil, according to Dr. Colin Campbell, a former oil consultant turned peak oil activist, the peak of oil production might be crossed as early as this year. Despite the fact that there are at that moment still large oil reserves available, the cost and the conflict of distribution will increase when dwindling supply faces rising demand. The EU is attempting to secure its almost urban infrastructure of oil- and gas-pipelines. The “Inogate” program, short for Interstate Oil and Gas Transport to Europe, aims to ensure regional stability, cooperation, and investment to secure the oil supply. Shown on the consumer side is the amount of petrol stations per oil-corporation and country.

The Baku-Tiblisi-Ceyhan (BTC) pipeline from Azerbaijan to the Mediterranean Sea connects for the first time Baku, where the very first oil drilling derricks were built, directly with Europe navigating around politically unstable Armenia.

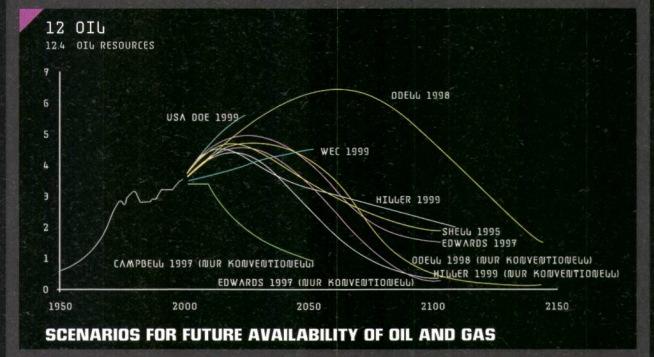
Markus Schaefer, Isabelle Bentz

OIL WORLD



An overview over fossil fuel reserves, production, and consumption world-wide shows their uneven distribution. It also gives an idea about their flows and choke points.

OIL RESOURCES



Opinions differ as to when we will run out of oil. Shown here are reserves when extracting oil with conventional methods, respectively methods that are not commonly used yet. Even though large reserves remain, demand shows no sign of slowing its exponential growth. Conflicts are certain to arise once decreasing reserves intersect with increasing demands.