Designing The Middle Future - Scenarios

Prof. Joseph Giacomin

Scenario

The word is borrowed from the world of performance theatre where it refers to the sequential elements of a screenplay, such as the actions of the performers or the changes in the stage setting.

The term is widely used to refer to a sequence of events or an account of a projected course of action.

Alcamo, J. and Ribeiro, T. 2001, Scenarios as tools for international environmental assessment, Vol. 5., European Environment Agency.

Scenario

In commercial settings a scenario is usually a story describing either a sequence of events, an interaction between people and an artefact, or a possible future.

It is a contextualised description which usually includes location, time, goals, plans and typical reactions.

Giacomin, J. 2024, Future Autonomous Road Vehicles, Routledge, Abingdon, Oxon, UK.

Scenario Elements

Step-Wise Changes	The portrayal of step-wise changes in the conditions, situations or people.
Driving Forces	The main factors or determinants which influence the step-wise changes.
Base Year	The beginning year of the scenario.
Time Horizon And Time Steps	The time horizon describing the most distant future year covered by the scenario.
Storyline	A narrative description which highlights main features and the relationships of those features to the driving forces.

Alcamo, J. and Ribeiro, T. 2001, Scenarios as tools for international environmental assessment, Vol. 5., European Environment Agency.

Scenario Development

Set Boundary Conditions	define the major structural terms of reference of the design activity such as any physical, manufacturing or cost barriers, the intended geographical coverage, the target population and the target time window.
Identify Key Driving Forces	obtain the opinions of the main stakeholders through workshops, surveys, interviews or Delphi methods and summarise the driving forces which the stakeholders mentioned in a qualitative and/or quantitative manner.
Develop Mini-Scenarios	define mini-scenarios consisting of descriptions of the engagement and interaction with one of the aspects or consequences of one or more of the driving forces. A single persona (individual) is usually used in a given mini-scenario so as to ensure a single character focus based on a single lifestyle and single point of view.
Write Full Storylines	extend and elaborate each mini-scenario based on the character, lifestyle choices, emotional responses and other human characteristics of the associated persona. The storyline development is guided by narrative criteria such as "what is done", "where is it done", "by whom", "when", "by what means" and "in what way".

Cha, K 2019, Affective Scenarios In Automotive Design: a human-centred approach towards understanding of emotional experience, Doctoral Dissertation, Brunel University London, London, UK.

Scenario Types

Narrative Scenarios

Narrative scenarios are based on written text. They use the power of the written word to describe the step-wise changes in the form of a short story. They can consist of anything from a set of bullet points to a mini-novel.

Storyboard Scenarios

Storyboard scenarios are based on a combination of text and graphical images, often in comic book format. Like a comic book they use both words and pictures to stimulate people's memories and to tell the story.

Scenario Types

Planning Scenarios

Planning scenarios are hypothetical future situations which are based on assumptions about the key factors and driving forces. They are usually broad in nature and focus on the big picture. They are meant to assist in long-term strategic planning and policy formulation.

Design Scenarios

Design scenarios are usually more specific and more finely detailed. They describe a situation in which an interaction of some type occurs between people and an artefact, either in the present or in a possible future.

Daily-Use Design Scenarios

Daily-use scenarios capture the actions which the user would be expected to perform most frequently. They help to consider those aspects of the product, system or service which manifest themselves most frequently.

Cooper, A. 2004,The Inmates Are Running the Asylum: why high tech products drive us crazy and how to restore the sanity, SAMS, Pearson Education, Indianapolis, Indiana, USA.
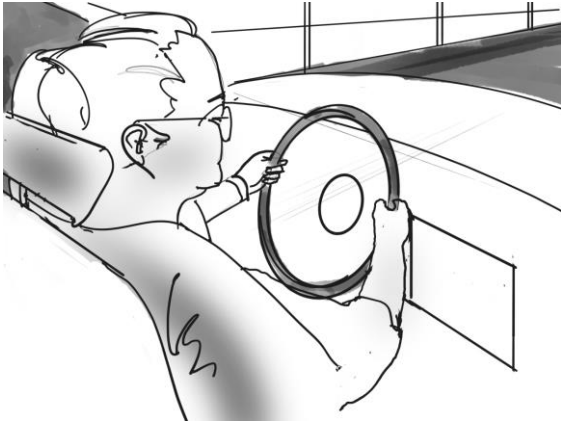
On a motorway a driver concentrates on the road ahead.
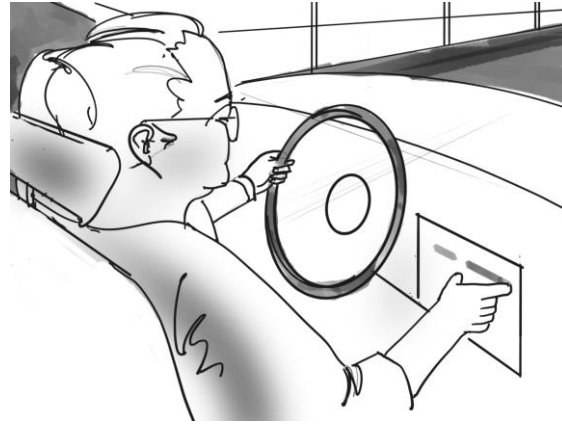
Just before an exit a dashboard mounted navigator alerts the driver and requests confirmation of the proposed route.

Confirmation is by pushing either the words "proceed to route" or "suggest new route".

Daily-Use Design Scenarios

Giacomin, J. 2024, Future Autonomous Road Vehicles, Routledge, Abingdon, Oxon, UK.

Necessary-Use Design Scenarios

Necessary-use scenarios describe events and actions which must be performable, even if only occasionally. They capture situations which the designer hopes will not occur, but which the designer must ensure can be dealt with.

Cooper, A. 2004,The Inmates Are Running the Asylum: why high tech products drive us crazy and how to restore the sanity, SAMS, Pearson Education, Indianapolis, Indiana, USA.
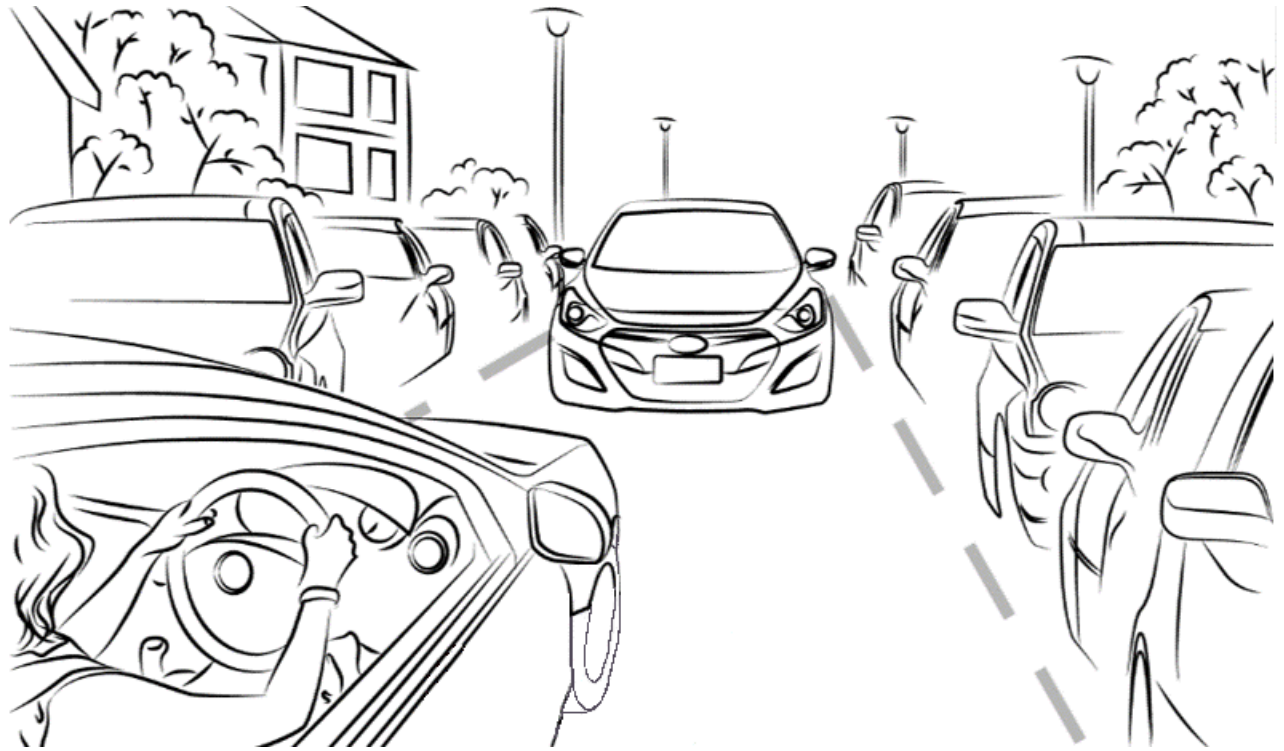
On a tight city road two drivers approach each other with only space for one to pass at a time. One driver, even though there were several opportunities to slot in between parked cars, refused to give way and forced the approaching car to stop and maneuver with difficultly.

Necessary-Use Design Scenarios

Cha, K 2019, Affective Scenarios In Automotive Design: a human-centred approach towards understanding of emotional experience, Doctoral Dissertation, Brunel University London, London, UK.
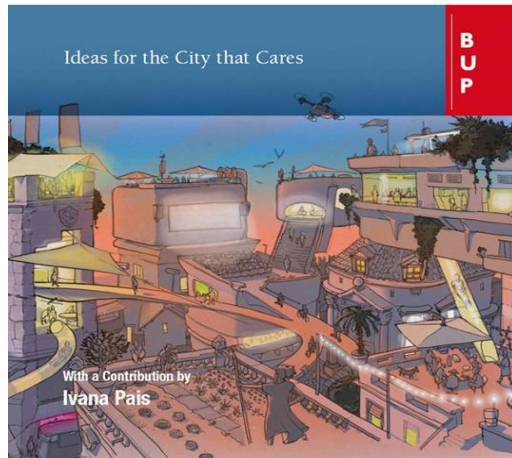
Affective Design Scenarios

Affective design scenarios describe situations where an interaction of some type occurs between people and an artefact, with the interaction tending to stimulate emotional reactions from the people.

Affective design scenarios are usually deployed to consider those situations where the greatest positive or the greatest negative emotions are likely to occur.

Cha, K 2019, Affective Scenarios In Automotive Design: a human-centred approach towards understanding of emotional experience, Doctoral Dissertation, Brunel University London, London, UK.

A father bought a new car and took it out with his son for a first drive. After the father pressed the ignition button his son became excited, playing with every dial in the centre console and touching the satnav, as these were new to him. The father took a picture of his son playing in the car to capture the moment. They then drove to the local coast and parked at the beach for ice cream.

Affective Design Scenarios

Design Orientating Scenarios

Manzini has discussed what he refers to as "design-orienting scenarios" which he describes as "...a set of motivated, structured visions that aim to catalyse the energy of the various actors involved in the design process, generate a common vision, and hopefully cause their actions to converge in the same direction. They consists of three fundamental components: a vision, a motivation, and a strategy".

Through reasoning and examples they articulate the issues involved and the advantages offered. They are more signposts which point in a desired direction than as situations which need exploring.

Manzini, E. 2003, Scenarios of sustainable well-being, Design Philosophy Papers, Vol 1, no.1, pp.5–21.

Ezio Manzini

LIVABLE PROXIMITY

Ideas for the City that Cares

B U P

With a Contribution by
Ivana Pais

Design Orientating Scenarios

Manzini, E. 2022. Livable Proximity: ideas for the city that cares, Bocconi University Press, EGEA S.p.A., Milano, Italy.

Thank You