

From user to character – an investigation into user-descriptions in scenarios

INT. RESTAURANT – MORNING (PRESENT DAY)

LOUISE is a waitress in a coffee shop. She is in her early-thirties, but too old to be doing this. She is very pretty and meticulously groomed, even at the end of her shift. She is slamming dirty coffee cups from the counter into a bus tray underneath the counter. It is making a lot of RACKET, which she is oblivious to. There is COUNTRY MUZAK in the b.g., which she hums along with.

INT. THELMA'S KITCHEN – MORNING

THELMA is a housewife. It's morning and she is slamming coffee cups from the breakfast table into the kitchen sink, which is full of dirty breakfast dishes and some stuff left from last night's dinner which had to "soak".

She is still in her nightgown. The TV is ON in the b.g. From the kitchen, we can see an incomplete wallpapering project going on in the dining room, an obvious "do-it-yourself" attempt by Thelma. (Khouri 1990)

When I first read the script of Thelma and Louise I was drawn into the story. I immediately imagined the characters as real persons and I was so interested in what happened to them that I continued reading until the end. As I read I tried to figure out in my imagination why Thelma and Louise acted as they did and what did motivate them, a long time before the script gave me any clues. This script is what, in movie terms, is called a good read.

THE BALANCE BETWEEN USE AND USER

When I later came to work with and study scenarios, I was surprised to find that the scenarios never presented the users as vivid characters. At best they were stereotypes and made me laugh, at worst they only existed as a name.

It raised some question from both a writer's and a reader's point of view:

- How can you predict the goals and actions of a user, when you don't know anything about the user as a person?
- Why use descriptions of users that the reader can't engage in?

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Lene Nielsen
Department of Informatics,
Copenhagen Business School

- What does it take to write a good description of a user?

To me it seems important to know and be conscious of the user as a character in the written scenarios. Without this it will be impossible to be involved with the user especially when the user's experiences are far from your own [8, p. 11] and the lack of involvement will make it difficult for the writer to predict and the reader to imagine the user's actions.

In this paper I look at two different scenarios written by John M Carroll and Alan Cooper – authors of articles and books about the scenario-based design methods. I try to deduce from their writings and from the examples they give of scenarios, how they depict the process of describing the users in the scenarios.

Alan Cooper has a focus on the description of the user (Personas, in his term), while Carroll does not describe the depiction of users as such. The user-descriptions are embedded in the scenarios though and I will look into these.

Secondly I take a look at film scriptwriting and let the inspiration from this field suggest ways in which character descriptions can improve scenarios.

Finally I will look into the impact this has on the research phase that goes before the description of the user.

It is not my aim to provide a complete method, but I will look at the process of film scriptwriting and focus on some of the methods and tools.

It is my aim in this paper to provide a brief overview of:

- The author's attitude towards the model-user.
- A definition of what constitutes a character.
- An attempt to look into what it takes to write and describe "a good character".

A SCENARIO

A scenario is a written story that describes the future use of a system or a web site from a specific, and often fictitious, user's point-of-view. The scenario is created around a protagonist, a setting and a goal. The structure of the scenario follows the basic structure of all stories whether oral,

written or visual. As Carroll [3] points out, it includes the traditional elements of a story: setting, agents or actors, goals or objectives and sub goals. It has a plot thus including sequences of actions and events.

The scenario contains written descriptions of processes that are to be implemented, not on paper, but in an entirely different medium – on a screen in an interactive system.

Scenarios are used for a variety of purposes: to evaluate system functionality, to design attributes and features and to test theory [Campbell in 12]. The scenario can be used at many levels in the design process, where it is common to use them in the beginning of the design process to illustrate user needs, goals and actions. Some designers use scenarios during the whole design process and return to them again and again. Others use them only as an offset for the creative process, never to return to them again.

The author can vary; some let their users write [2], others make user-observations, interpret the data and write the scenarios on that basis. Others again let the customers/clients write the scenarios (amongst these are the web agency Mus&Mænd).

For Cooper the scenarios are differentiated by the users' goals while Carroll has a list of 7 methods to create scenarios [4] that can be divided into three areas: reflections about actors (users), about goals and about the organisation.

LOOKING FOR THE USER

Cooper

In the literature I have looked into about scenario-based design methods, the only one who writes specifically about the character is Alan Cooper, who incorporates descriptions of users – Personas – in his design method – Goal-Directed [6, p.179].

Cooper defines scenarios as "a concise description of a persona using a software-based product to achieve a goal."

Cooper puts an emphasis on users' goals, whether it is company goals or personal goals. The Personas are hypothetical archetypes of actual users, defined and differentiated by their goals. They are described from a goal hierarchy, where

personal goals have priority, to practical goals and practical goals that are affected by the company goals [6, p.124].

In order to differentiate the Personas, it is important to look at:

- User-skills
- Practical goals, that are individual goals: avoid meetings, handle clients' demands, record clients' order, create numerical model of the business
- Personal goals, where the most important is not to feel stupid, not make mistakes, get an adequate amount of work done, have fun [6, p.156]
- Corporate goals, that are the goals of the company
- False goals, that are system goals

For Cooper it is important to create believable Personas; this is done by creating specific details and being specific in the description.

Angela is a 31 year old PR consultant who is based in Los Angeles, but who has customers throughout the entire West Coast. Angela often has to travel during the week.

Angela's Goals:

- Always be on time for client meetings
- Travel without hassle
- Don't feel stupid

Angela's Scenario: Angela is on her way to Seattle and has a 30 minute layover in an unfamiliar airport. She really wants to grab a cup of coffee before she heads to her connecting flight.

After Angela disembarks, the airport map and service details are downloaded to her PDA via a wireless local network, using Bluetooth. Angela quickly finds her favorite coffee shop in the list, and sees it is only a few minutes walk away.

The Wayfinder shows Angela exactly how to find the coffee shop, with handy landmarks indicated on her map.

Angela follows the directions the Wayfinder gives her, and success-

fully finds the coffee shop. Soon she's enjoying a double-tall, fat-free Mocha Latte Grande, with sprinkles.

Now Angela needs to find her way to the gate. She uses the Wayfinder to look up the gate for her connecting flight, and then follows the directions it gives her.

Angela arrives at her gate with plenty of time to spare.

This description is an example of the Goal-Directed method. It is built on descriptions of users and scenarios. Angela is described from her personal and practical goals.

Looking at this description it becomes clear that she is described in a very limited way that only deals with her performance as a worker and she has very limited goals that only concern her working life. There is no consideration for any other characterisation that goes beyond her working life. Angela is described in such an anonymous way that it never becomes clear why she acts as she does. She could be anyone or actually no one.

Cooper has a limited view on what constitutes humans, their differences and similarities. He especially mentions the fear of being stupid as a common human trait, but not everybody is afraid of feeling stupid. Looking at the other traits he mentions, there are other aspects of humans than to have fun. And a person is much more than his or her goals.

In the above example we don't get to know enough about Angela to be able to know if the scenario can solve the problems she meets and the questions she asks. She is what I later will describe as a flat character.

Carroll

John M Carroll has a long list of writings about using scenarios in system design. In his definition: "scenarios are stories – stories about people and their activities" [4, p. 46] and the user is described via organisational roles, goals, actions and interaction with the system.

In his seven methods to designing scenarios [4, p. 265] he works with both technology-driven and use-driven

scenarios based on observations and discussions of use and of analysis of existing systems in use.

He emphasizes that scenarios should look at: task context, activity, prior knowledge, reasoning and experience.

Harry is interested in bridge failures; as a child, he saw a small bridge collapse when its footings were undermined after a heavy rainfall. He opens the case study of the Tacoma Narrows Bridge and requests to see the film of its collapse. He is stunned to see the bridge first sway, then ripple, and ultimately lurch apart. He quickly replays the film, and then opens the associated course module on harmonic motion. He browses the material (without doing the exercises), saves the film clip in his workbook with a speech annotation, and then enters a natural language query to find pointers to other physical manifestations of harmonic motion. He moves on to a case study involving flutes and piccolos. [3, p. 3].

This scenario for an educational project focuses on actions. The scenario describes Harry and the tasks he performs. It gives a brief introduction to Harry as a person who is interested in bridge failures because he saw a bridge collapse when he was a child. This explains why Harry chooses to open a case study of a bridge, and it explains why he chooses to open up the case study of flutes and piccolos as both deals with vibrations.

There is no description of where the action takes place – where Harry is situated – and what motivates Harry's choices – who Harry is as a person. The motivation mentioned is that of the bridge collapsing. But does that lead to a fascination with vibrations too?

Harry is a person I feel difficult to engage with. From my point of view he seems a little weird, as though he gets a lot of pleasure out of watching bridges collapse. There might be some Harry's out there, but I hope there aren't many. And I have a feeling that Harry might not be a valid representative of the users. The scenario is

what I later will describe as a plot-driven story.

The scenarios are as most stories characterized by causality – an action from the user creates a reaction from the system, starting a new action from the user. To understand what makes the user act in the first place, it becomes important to understand what motivates the user.

In the example with Harry there is a motivation for his first action – opening a case study of the Tacoma Bridge and seeing a video of the bridge collapse. His next action – he browses the material – has no motivation. It seems plausible that he could have done something entirely different. His third action is to save the video clip. Again there is no motivation why he acts as he does. A thorough description of Harry as a person could have helped the design team to understand what is behind Harry's actions and, as I will show later, understanding Harry can create design innovations.

LEARNING FROM FICTION

Both examples of user-descriptions lack insight into the user as a person and both examples derive from a story tradition that focuses more on action than on character development.

I will now look into what it takes to make a user-description that goes beyond the flat character and the plot-driven story, and describe what characterises these terms.

The characters in film have similarities to the users in scenarios. Both are based on predictions and predictions of something that is to be created in another medium. Both describe actions and, in contrast to novels, do not deal with inner thoughts of the protagonist. This accounts in both film and scenario for the user/character being the central element from which the scenario/story develops.

There is a close relationship between the process of scriptwriting for the fiction film and the writing of scenarios. They describe a story that includes processes, which will be implemented in a visual medium and they have focus on persons with specific goals.

In scriptwriting you have to establish a character on print, a character that the reader believes in and whose actions

spring from the character's traits and experiences. This should be true for scenarios as well.

The character-perspectives in both film and scenarios have similarities in that of the narrator situation of both is that of a "figural narrative situation" [13] where the narrator withdraws and becomes covert to the extent of almost vanishing.

THE PROCESS OF WRITING

In the film script, the character has to be established on the first page of the script, s/he has to grasp the reader's attention immediately so the reader will be encouraged to read on and be interested in what happens to the character. Writing a scenario has a similar pattern; the description of the user must be vivid and the user should be described in such a manner that during the reading process it becomes clear how and why the model-user acts the way he/she does.

The film scriptwriting has a lot of rules established taking into account the transformation from paper to screen. One such rule is only to describe what can be seen. An example is that the sentence "she feels happy" should be replaced with "she smiles": that is the visual expression of the feeling. This forces the reader to imagine the transformation of visual information in the script. But it also forces the author to be aware of what lies behind the visual expression. The author must be fully aware of the feeling that is behind the smile, and what created the feeling in order to communicate this in the script. It is not necessary to show everything, but the author needs to have insight into the character in order to decide what should be shown [10, p. 40], thus creating a consciousness of what background the character has and which traits motivate the character to act and force the story to develop. In a similar pattern the reader of a scenario is forced to imagine the user, the user's actions, the motivation behind the action and how the system reacts. Only fairly global details are included in the scenario, but the author should be aware of details that might have an impact on the user's and the system's behaviour.

THE CHARACTER'S FUNCTION IN THE STORY

Stories can be divided into two types: the plot-centred story and the character-driven story [10]. My focus is on the character-driven story. Scenarios should have a strong central character with goals and desires that needs fulfilment during the story, thus resembling the character-driven story.

In theory concerned with fiction, it is easier to find descriptions of the plot-driven narratives than of the character-driven narratives. From Aristotle to the Structuralists there is a common notion that the character is nothing more than a function of the plot [5].

What differentiates the description of the characters in the two forms of narrative are the number of traits. In the plot-driven – or a-psychological – narrative the character has few traits and the traits function as a catalyst for the action. As Todorov [Forester in 5] finds out in his analysis of fiction; when a trait is mentioned the character immediately acts on the trait. This makes the character highly predictable and creates what is called flat characters.

Looking at Harry it becomes clear that Harry has few traits and when one trait is mentioned – his devotion for collapsing bridges – he immediately reacts to it. Harry as a character is not easy to understand, as the description does not draw on a shared cultural understanding and common knowledge. Not many are familiar with somebody who saw a bridge collapse as a child.

In the character-driven – or psychological – narrative, the character has a number of traits and what Horton call a number of voices that interact with and against each other. This makes the character's actions non-predictable and creates rounded characters. Though Lajos Egri [9] sees the character as a key element of the story, it is the premise that drives the character forth and in the end makes the story. Horton [10] exclusively focuses on the character as the key element to drive the story on. The character can be defined as "a paradigm of traits; "trait" in the sense of relatively stable or abiding personal quality" [5, p. 126].

Looking at Thelma and Louise there are no traits mentioned, but the descriptions draw on a shared cultural understanding of

distressed housewives and waitresses – our prototype schemata. When creating stories – fabulas – we draw on three schematas: prototype schemata, template schemata and procedural schemata [1, p. 49]. In these two short scenes we get information about:

- Where the characters are situated (restaurant, kitchen)
- The characters' names, age and sex
- Their social status (not rich)
- Occupation (waitress, housewife)
- Marital status (single/married)
- Temper (self-control, lack of self-control)
- Character traits (active/passive)
- Life situation (frustration)

In the character-centred story the character is seen as a personage rather than somebody who is the product of the plot and just participating in the story development – instead the character creates the story development [10, p. 15].

The story develops because the character develops out of motivation and it is this that spins the plot. Lajos Egri [9, p. 34] uses dialectics as a way of looking at the character and character development. It is oppositions and conflicts that create actions; the dynamic of the character can be expressed through inner contradictions. To understand the character's motivation for action it is necessary to have background information about the character. Actions can either stem from changes in the character's environment or from the character's own inner contradictions thereby creating a development in the character.

"It is in our nature to change. A character stands revealed through conflict; conflict begins with a decision; a decision is made because of the premises of your play. The character's decision necessarily sets in motion another decision, from his adversary." [9, p. 60-61]

THE CHARACTER CONSTRUCTION

But it is important to distinguish between analysis of fictive narratives and the creation of fictive narratives. In my hunt for the character I have found two authors who have tried to investigate how to write char-

acters that can be labelled as rounded: Lajos Egri and Andrew Horton.

The writing of Lajos Egri has had a huge impact on Danish film and TV drama, as he was one of the cornerstones for the TV-SUM (TV as a means for Entertainment) approach by Ingolf Gabold. His "Art of Dramatic Writing" [9] is still one of the most quoted within film scriptwriting. His dialectic approach to the scriptwriting and the reading process gives him an emphasis on both the surroundings and the psyche in the development of the character. A description of a human being must consider the physiological aspect as well as sociology and psychology, each influencing the character's behaviour. Looking at the person's physiology, sociology and psychology provides an understanding of the motivations that lie behind his actions.

"If we understand that these three dimensions can provide the reason for every phase of human conduct, it will be easy for us to write about any character and trace his motivation to its source [9, p. 35]."

- Physiology includes: sex, age, height and weight, colour of hair/eyes/skin, posture, appearance, defects and heredity.
- Sociology includes: class, occupation, education, home life, religion, race/nationality, place in community, political affiliations and amusements/hobbies.
- Psychology includes: sex life, ambitions, frustrations, temperament, and attitude towards life, complexes, extro-/intro-/ambivert, abilities and IQ.

The dimensions include both present and past, both self and relations to others. Considering these dimensions can help and facilitate the creation of rounded characters.

Andrew Horton uses Bakhtin's concept of the carnival [10, p. 27-40] as a term that can explain the character and he describes the character as a cacophony of voices. Horton's description of the polyphone character is made up of the sum of the character's consciousness and self-consciousness. Horton's concept of the carnivalesque has several implications for a theory about the character:

- Character as process (state of becoming)
- Character as polyphony (multiple voices interacting in different times)
- Character as social discourse that belongs to and interacts with a culture and its many voices

In Horton's view it is the cultural signs that are the input to an understanding of the character and to the creation of the character. He makes a distinction between the individual traits of the character and the unique. Even though we are all individuals, we are not completely unique. We have a common language created by the time and the cultures we are part of. This makes no two persons identical because we all participate in different social groups. And it is the multitude of experiences that creates the character.

Horton has, like Egri, an emphasis on society, location and era which influence the individual that is to be created.

"Knowing the place and time makes knowing the character much easier [10, p. 38]."

The character includes both personal (inner) and inter-personal (social, public, professional) elements. All characters have inner needs and goals as well as inter-personal desires and professional ambitions that help characterize them and impose their own requirements, restrictions and privileges. When character, circumstance and chance cross there is a possibility for many voices to speak.

THE ROUNDED USER

Looking for the rounded character will involve looking for:

- Multiple traits
- Psychology, physiology and sociology
- Inner needs and goals, interpersonal desires, professional ambitions.

When Horton mentions that the character should be so engaging that the reader takes an interest, this will – in the scenario writing process – be as important for the team doing the writing. When the writer engages in a user and the traits and goals of the user, the prediction of the writing will become much more grounded. Doing so will require a thorough insight into the users

and into what distinguish different groups of users from each other. The findings reported in [7] are a good example of what happens when characters becomes stereotypes. The authors realised that of the three extreme characters they created, only one worked as an offspring for design. This character had traits that it seems the authors were familiar with and had multiple traits. Instead of being a polyandrous twenty-year old woman, she might as well have been, in my point of view, an ordinary businesswoman who had to juggle with a lot of clients, who must not be known to each other.

Thereby it also has an impact on the research done into user-behaviour and user-characteristics. It will not be enough to look only at goals, tasks and settings, but also the mentality and the traits that the users share should be noticed. These should be explicitly used in the writing of the scenarios and have an impact on the way the users behave with the site/system and the needs they have.

The characteristics of the character-driven or psychological narrative are:

- The character is seen as a personage
- The character development creates the story development
- The character has a number of voices that interact with and against each other
- The character's actions are non-predictable
- The characters are rounded.

CONCLUSION

In the descriptions I have read of how to create scenarios there is no emphasis on how the user should be described and what to consider in this process.

The character-descriptions I focus on in this paper have a tendency to be described as stereotypes rather than descriptions of believable characters, thus influencing the value of the scenarios as predictions of the future use of a web site or a system. "Stereotypes differ from clichés in that the former reduce an entire class (e.g. fat people, depressed women, or post office workers), and let the reader assume the rest. In contrast, a cliché is a hackneyed phrase. A stereotype is not identical to the real thing. Stereotypes seem to work best

when characters are not created to be deep, but only to be a mental picture" [8, p. 13]. As the stereotypes will function as a mental picture they will never enable an understanding of the user.

To describe the user as a rounded character brings a focus on the user into the design process. It helps the design team to engage with the user with empathy, thereby remembering the user all the way through and remembering that the design is for a user. But it differs from the fiction film script in that the description must be based on knowledge of actual users, on how they perceive the world, how they act and where they act. It is based on facts and is not fiction.

The approach has an impact on the way research into users is performed. It becomes important to pay attention to:

- The users' surroundings
- The character traits that characterise the users
- The goals and tasks that characterise the users

With this approach a whole new insight could be created of Harry:

Harry is a 35-year-old engineer. He is interested in bridge failures, as he has to understand the way nature can work on bridges, but he is also interested in a lot of other phenomena and is easily drawn away from what he is currently investigating.

Harry is in his office when he opens the case study of the Tacoma Narrows Bridge and requests to see the film of its collapse. He quickly searches the film clip to where it lurches apart. He opens the associated course module on harmonic motion. He browses the material, but it is not able to catch his attention and he doesn't do the exercises. His attention is caught by other physical manifestations of harmonic motion. He moves on to a case study involving flutes and piccolos, but he soon finds it boring.

The phone rings and Harry answers it...

If this Harry is a typical user (in my experience this is not farfetched), the scenario shows that something has to be done to keep Harry's attention and make him do the exercises.

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