

Images of SET and gender in the Austrian soap opera “Anna und die Liebe”

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Abstract:

Attempts to answering the question why girls and boys chose different paths in their education which leads to a constant reproduction of a sex-segregated labor market are multiple. One recent stream of studies concentrates on the analysis of media images following the finding that certain disciplines and people working in these disciplines (for example science, engineering and technology, short: SET) are portrayed in a very unrealistic (stereotypical) way. This paper presents findings from the analysis of representations of SET and gender in an Austrian soap opera that was part of the EU-project MOTIVATION. If and how media images influence (young) people in their job decision can not be answered here, but it will be looked at media images of SET in those media products frequently used by young people such as soap operas. Two main questions will be addressed: How is SET portrayed, if at all, and how is it used to create concepts of masculinity and femininity?

In the 1970s, when feminist scientists began scrutinizing societal structures and institutions, they soon named horizontal and vertical segregation in various fields of society, e.g. in sports as well as in science, engineering & technology (SET) as two major concerns. Two patterns were discovered that lead to this segregation in SET: the *leaky pipeline* and the *scissors*¹. Since these discoveries scientists from various fields (e.g. sociology, psychology, pedagogy) explored the situation of women in SET more thoroughly, representing the image that girls and women need help, support and motivation to stay in these fields. Even though in the past decades the focus was broadened by implementing mentoring programs at universities, sensitizing educators and managements, empowering female engineers and scientists, forming national and international platforms and working groups etc. (Wächter 2009b), the prevalent practices among researchers and people working in SET still mostly perpetuate stereotypes and create a dichotomous view on males and females. Two areas that have been slightly neglected by research and policies but need to face deeper changes are (1) working cultures and structures within institutions and (2) media representations and images of SET (Herman 2009; Lewis 2009; Sagebiel et al. 2009; Thaler/Dahmen 2009; Thaler/Dahmen/Pinault 2009; Wächter 2009a and 2009b). This article takes up the second

¹ The term *leaky pipeline* refers to the continuous exit of women from SET, while *scissors* illustrates the different career tracks of men and women (e.g. ETHAN 2000).

research area and follows the hypothesis that unrealistic and stereotypical media images of SET (and gender) are one factor leading to the low percentage of females in SET and the general misperception of SET jobs. Before representing images of SET and gender in a specific program format, an Austrian soap opera, to show how unrealistically SET is portrayed, the formulated hypothesis will be further explained and emphasized by some theoretical thoughts. The empirical data presented stems from the EU-project MOTIVATION² that was carried out in seven EU-countries and will be introduced later on.

Media images & reality

Programs, as Karin Esders (2008) writes, create a perception of reality. Often, media images influence the ways of perceiving scientific fields and professions because they are the only available or dominant sources of knowledge. In addition to offering images, media products create a vision of reality in which the viewers have to place and orient themselves. Viewers have to decide for themselves whether they take media portraits as adequate representations of reality. Independently from (not) making that decision they are inevitably confronted with the images when watching TV. Even the process of reflecting on the adequacy of media portraits involves a learning process where the viewers learn about their view as well as the media producers' view on reality, SET, and gender. The question of formal/informal and intentional/incidental learning that arises here will not be further pursued (see Thaler 2010b). Instead, the aim is to look at the pictorial gender knowledge in media images from a sociological perspective. The research that was carried out and will be outlined later concentrated on two aspects: images of SET and the role that gender plays within these SET images. It combines these two aspects that have only been taken up separately before MOTIVATION, e.g. by Wächter (2009a) and Emons, Wester, and Scheepers (2010). Wächter analyzed Websites and print material that is used to address scientists/engineers. Her findings led her to conclude that "[e]xternal and internal communication of companies and universities still too often reflects a masculine image of the engineering and technology fields" (Wächter 2009:77). Emons, Wester, and Scheepers (2010) looked at drama programs produced in the Netherlands and asked if there are longitudinal changes in the portrayal of gender roles in television drama broadcast on Dutch

² Empirical data presented in this paper derive from WP 2 of the EC-7 FP-funded project "MOTIVATION". Involved were the following persons: Felizitas Sagebiel (coordination) and Jennifer Dahmen in Germany, Lisa Scheer, Anita Thaler (WP 2 leader), Christine Wächter and Magdalena Wicher in Austria, Anne-Sophie Godfroy-Genin and Cloé Pinault in France, Els Rommes in the Netherlands, Carme Alemany in Spain, Bulle Davidsson in Sweden and Natasa Urbanciková and Gabriela Kolvekova in Slovakia. For further information see www.MOTIVATION-project.com.

TV. The title of their paper, “He works outside the home; she drinks coffee and does the dishes” reflects their findings: “[T]he gender gap with regard to the *activities* of male and female characters in television drama is almost as wide as it was 25 years ago: Compared to female characters, male characters are more often involved in paid work and more female characters are involved in childcare, the household [...] and other activities.” (Emons, Wester, and Scheepers 2009:49) While Wächter focused on SET and gender, the *topic* that is of interest here, the three Dutch scientists focused on media programs which are the *objects* of study here. Both studies revealed that females and males were portrayed rather stereotypical, so the question is whether this is true for Austrian soap operas as well.

Pictorial gender knowledge

The theoretical approach to the analysis of images of SET and gender as it is postulated here is very new. The concept of *gender knowledge* that was first formulated by Irene Dölling (2003, 2005) and further developed by Angelika Wetterer (2008) can be of good use when discussing images of SET and gender. Before Dölling and Wetterer it was Stefan Hirschauer (1996) who put some thoughts on knowledge about males and females on paper without using the term gender knowledge yet. His article titled “How are women, how are men?” addresses the question of how the binary sex-model (German: Zweigeschlechtlichkeit) comes to be social reality and a natural fact to members of society. In Hirschauer’s view, three types of knowledge sustain the binary sex-model: (1) cognitive-linguistic, (2) pictorial, and (3) practical knowledge. Basically, members of society have a perception of the world as one in which two contrary sexes exists because their everyday life knowledge tells them that all humans are inalienable, due to physical reasons either female or male (Hirschauer 1996:243). Any person met during the day is perceived as female or male according to this knowledge. Supported is this everyday life knowledge by scientific knowledge on the nature and emergence of differences between the sexes. Besides discourses, visualizations play an important role in maintaining the binary sex-model. Images in the media as well as daily displays by members of society constantly visualize the binary sex-model. Part of these displays is the third knowledge form – practical knowledge. Knowledge is also incorporated and becomes part of the habitus which in return functions as a constant display of knowledge.

The pictorial knowledge is the one that is of interest here. When looking at soap operas, the question is what kind of pictorial gender knowledge can be found. It can either reflect knowledge of the differences between the sexes or rather display males and females as heterogeneous groups that share many similarities as well as showing differences within the groups. The soap characters could be portrayed in a stereotypical, differentiating way –

men producing and using technology, being scientists and engineers, women being incapable of using technology let alone working in SET – or in a more adequate and realistic way, namely both sexes in various roles and activities.

MOTIVATION & soap operas

The findings presented in this paper represent a summary of the results of an Austrian soap opera analysis that was part of the EU-project **MOTIVATION**. Aim of this project that started in 2008 and was finished in 2009 was an "exchange between partner countries in Europe about factors which influence the image of science and technology under gender perspectives to attract young people" (<http://www.motivation-project.com/>, 05/21/2010). The TV format soap opera was chosen besides other media products because it is very popular among adolescents who were the main target group of the project³.

Soap operas as known today stem from daily running radio serials first broadcasted in the US in the 1930s. When the triumphal march of the radio began, the genre of domestic drama began being aired and large companies such as Procter and Gamble, Colgate-Palmolive or Pepsodent saw their big chance. Housewives, the main consumers of their products, happen to listen to the radio on a regular basis. In order to attract them the companies invested in these shows, with the name of the products, e.g. Procter and Gamble's soap Oxydol, being part of the radio serial's title and being mentioned several times in the serial itself. After World War II, when TV sets were being produced in large numbers, the radio shows were finally transferred to the new medium TV.

How can soap operas be characterized? What distinguishes soap operas mainly from other genres is the plot. Soaps concentrate on the private world of the protagonists, especially on their personal problems, conflicts and issues. The three central elements of the plots are (1) relationships, (2) illness, and (3) intrigues and crime (Weiß 2004:19f.). Love and romance are two main themes while societal relevant topics are only addressed if they somehow affect the lives of the characters. Work life is usually only part of the setting or occasion for private problems. Injuries, illness and accidents are also prominent elements of soap operas although they are not portrayed in a realistic or threatening way. While action scenes are rare in soaps, excitement is generally being produced by kidnappings, revenge acts, conspiracy or the revelation of secrets or affairs.

"Overall, daytime serials create a world dominated by interpersonal relationships, where characters discuss romantic, marital, and family problems, and where health and work are major concerns within these contexts. There is little physical violence or crime. The serial world seems physically safe but emotionally hazardous, mainly because of the

³ More information can be found at www.motivation-project.com.

continuous sorting and re-sorting of relationships.” (Cantor/Pingree 1983:84, cited in: Weiß 2004:20).

This characterization of soap operas which is one possibility to see them leads to the eligible question on the role that SET can play in a soap opera. At first, after reading this presented characterization, one could over hastily conclude that SET professionals can be protagonists but their work life will most likely not be in the center of attention. At a second thought, though, one could think of many adequate SET professionals and scenes with SET in foreground in a soap opera plot. The successful French TV series “Plus Belle La Vie” that was analyzed by the French MOTIVATION team is one example that shows how SET topics and professions are popular soap opera plots.

Austrian soap opera study

The sample that has been analyzed by the Austrian MOTIVATION researchers comprises 23 episodes of the soap opera “Anna und die Liebe” (“Anna and love”) that were shown on the Austrian TV station ORF1 from February 27th until March 31st 2009 (episodes number 130 to 152). “Anna und die Liebe” (AudL) was chosen because among the 14- to 19-year-old it is the most popular Austrian soap opera with a market share of 26,5%. It is being co-produced by a daughter company of ProSiebenSat.1 Media AG (German) and the Austrian ORF since May 2008. Each episode has a duration of approximately 23 minutes and is broadcasted on ORF1 from Monday to Friday in the late afternoon.

All 23 episodes have been analyzed quantitatively and eleven of them qualitatively, using the soap analysis guidelines that were adapted to the youth magazine analysis guidelines⁴.

In the center of the soap opera stands Anna who is at first extremely shy but nevertheless pursues her dream of becoming a copywriter in the advertising agency Broda & Broda which is co-led by the man of her dreams – Jonas. As in any other soap the love story between Anna and Jonas (outcome unknown for a long time) lies at the center of the plot. Misunderstandings, intrigues by her sister, Jonas’ mother Natascha or brother Gerrit, and her own insecurity lead to many setbacks for Anna so that the question whether she and Jonas are ever going to be a couple keeps the audience tuning in every day. Most interaction takes place at the advertising agency Broda & Broda, the coffee shop, and the restaurant „Goldelse“ which is owned by Anna’s parents. These three shooting locations offer very realistic sceneries for SET as all three are working places for the protagonists where

⁴ Thanks to Anita Thaler, Christine Wächter, and Magdalena Wicher for their inputs at the interpretation session.

technical artifacts and machines are present. But as the following findings show, SET can mostly be found in the background, most of the time being only decór.

Empirical findings⁵

Beginning with statistical data, table 1 gives a first impression on the appearance of SET in the analyzed episodes.

Table 1: Overview: number of scenes, SET scenes and scenes with SET in foreground

Episodes # 130 – 152	Scenes	SET Scenes	SET in foreground
Sum	650	425 (65 %)	176 (27 %)
Average	28,3	18,5	7,7

The number of scenes in each of the 23 analyzed episodes of “Anna und die Liebe” ranged between 20 and 49 with an average of 28 scenes per episode. An average of 18 scenes of each episode can be classified as SET scenes, showing or dealing with SET in foreground or background⁶. An impressive percentage of 65% of all scenes were SET scenes, but this number decreases dramatically to only 27% scenes with SET in foreground. On average, only 7 to 8 scenes of one soap opera episode showed people dealing with technological artifacts, talking about SET or interacting with a SET professional.

Table 2: Top seven SETs in foreground

SET in foreground	Scenes (time)
Cell phone	80 (499 sek)
elevator	43 (230 sek)
telephone	8 (144 sek)
laptop	10 (111 sek)
refrigerator	14 (63 sek)
TV screen	4 (38 sek)
car / cab	4 (30 sek)

A more detailed look at the scenes with SET in foreground reveals that there are two main technological artefacts show in the analyzed soap opera: cell phones and elevators. In 80 out of the 650 analyzed scenes, the portrayed persons used cell phones to communicate. Cell phones in use were shown for 499 seconds in total. On second place comes the elevator which plays a rather important role in the soap opera “Anna und die Liebe”. In order to get to three of

⁵ For a more detailed insight into the empirical finding see Scheer & Thaler 2009.

⁶ SET in foreground is when people are dealing with technological artifacts, talking about SET or a SET professional is in a scene. When technological artifacts are part of the setting, but not in use or object of a discussion it was classified as SET in background.

the locations the protagonists usually use an elevator. These locations are the advertising agency, Jonas’ apartment and his mother’s apartment.

Table 3: Top seven SETs in background

SET in background	Scenes (time)
computer / TV screen	102 (815 sek)
refrigerator	51 (529 sek)
radio	68 (484 sek)
telephone	53 (398 sek)
car / truck / bus	51 (240 sek)
CD/DVD player	25 (239 sek)
coffee machine	35 (234 sek)

SET in background is commonly used to emphasize the function or purpose of a room, e.g. an office or a café. Due to the fact that two main locations of the analyzed soap are an advertising agency and a café, the two leading technological artefacts in background are (computer) screens and refrigerators. Interestingly, employees were seldom portrayed as working on the computers. As table 3 shows they were

mostly found in the background. Cars, busses and trucks are regularly shown to create the feeling of being in Berlin, Germany’s capital. Radio, CD/DVD player and coffee machine can be found in locations like the restaurant’s kitchen, the café, Gerrit’s office and Anna’s room.

Two questions guided the qualitative analysis of 11 episodes of *Anna und die Liebe*: “Is SET used differently or similar by various persons or in different contexts?” and “What can be said about the gender representations in the analyzed SET scenes?” The findings of the qualitative analysis are sorted by types of SET.

(Cell) phone

In the analyzed scenes men used phones more often than women and both sexes used phones more often for business than for private matters. Only four out of the 29 foreground scenes showed females using cell phones. Very often, the protagonists were accompanied by their girl friends when receiving or making a phone call. When this was the case, the women seemed quite passive – opposite to their partners who were actively using technological artifacts. Also, in some of the business scenes in which Gerrit, Jonas, and Robert (Jonas’ father who leads the agency with his son) used cell phones it seemed that the phone calls were not necessary for the soap story but instead emphasized the business status of these three men.

Elevator

In general, there were eleven incidents with elevators in the foreground. The elevator was generally used as a means of transportation, to get somewhere, as an opportunity to talk with somebody, and as a dramatic effect to enter or to leave a scene or a person. Four scenes displayed a single person leaving the scene by using the elevator – they were all very emotional scenes: Robert after a fight, Jonas going to America, Gerrit leaving Anna during a discussion, and Anna leaving the company sad and depressed.

In one scene Gerrit (male) let Anna step in the elevator first, then he followed and pressed the button which gave the stereotypical impression that he is the active and she the passive one. In one longer incident – we called it the "elevator manipulation incident" – the elevator played an important role. Anna wanted to force her sister Katja into telling Jonas the truth. In order to do that she asked her friend Maik for help. Maik used his technological knowhow to shortcut the elevator which Anna, Katja, and Jonas were using. While the three were trapped in the elevator Maik recorded their voices with a dictating machine and loudspeakers. In the end, Anna was not successful. Jonas thought she is crazy and it looked like Katja only said what Anna wanted to hear to get out of the elevator. However, Maik came out of this scene as looking very competent and self confident with technology.

Kitchen and office technology

Despite the fact that kitchens and offices were central locations of the soap's story, the protagonists were seldom portrayed as working with the technical equipment. Although four kitchens were shown in the soap, two of which were working places, the usage of kitchen technology was seldom part of the script – as well as cooking itself was not displayed either. Computers, coffee machines, coffee grinders, TVs, stoves, ovens, and refrigerators – all these machines were present but most of them never shown in an adequate scene of usage. For example, Lars, the owner of the café, and Lily, his girl friend who works for him, were not one single time shown using a coffee machine to make coffee. The same can be said about office technology. The boss Gerrit did not even have a computer in his office. There was only once scene, in which office technology was being used: Anna incidentally turned on Gerrit's answering machine when he sexually harassed her. Later Anna used this recorded message to her advantage. Laptops were used for private as well as business issues. Interestingly, no one working at the advertising agency was ever shown working on a laptop even though their jobs would in reality demand it. In one episode, Anna used an online forum to discuss her problems and to find help from other forum users. This scene was very realistic, especially her sister's misuse of online anonymity (she hurt Anna by giving her a wrong advise).

Car

Cars did not play an important role in the soap nor do any other means of transportation. Four foreground scenes showed cars, three of them cabs with male drivers. In the two scenes in which the protagonists were getting into the car, females received help from men while getting in. On the other hand, cars were often shown in the background, mostly in so called "filling-scenes", where cars were shown together with trams and busses to underline the image of the "big city life".

Conclusion

As the summary of the finding reveals, "Anna und die Liebe" does not contain many scenes showing the active use of a technological artifact. SET professions are totally absent, neither scientists nor engineers ever enter the stage. Therefore, the conclusion is that this Austria soap lacks an adequate representation of SET. The reality portrayed in "Anna und die Liebe", especially when it comes to work places, does not match with the real work life in an agency, café or kitchen. The two main plots – Anna working at the advertising agency and Anna's mother managing a restaurant and kitchen – should in fact lead to many scenes with SET in foreground but they do not. Additionally to the very unrealistic role that SET plays in "Anna und die Liebe", the soap is rather unsatisfying in terms of an equal gender representation. The pictorial gender knowledge that was found creates the impression that women are concerned with private matters more often than men, while men in this soap take over business roles. The only woman in a management position, Jonas' mother, is unfortunately more occupied with her private revenge campaign against her ex-husband. This stereotypical portrait is emphasized by the way men and women use cell phones or laptops. The elevator scene, sadly, is not a good practice example of SET although it seems that it's Anna's idea to shortcut the elevator. The one who handles the technology in this scene is a man while Anna is the one interacting and talking. Summing up, the pictorial gender knowledge that was found when analyzing eleven episodes of "Anna und die Liebe" can be characterized as creating a difference between male and female protagonists. This difference was emphasized by the usage of SET artifacts which followed the dichotomy male – active/public and female – passive/private in several scenes.

Literature

Dölling, Irene (2003), Das Geschlechter-Wissen der Akteur/e/innen, in Andresen, Sünne, Irene Dölling, Christoph Kimmerle (Eds.), *Verwaltungsmodernisierung als soziale Praxis. Geschlechter-Wissen und Organisationsverständnis von Reformakteuren*, Opladen: Leske + Budrich, 44–62.

Dölling, Irene (2005) »Geschlechterwissen« - ein nützlicher Begriff für die »verstehende« Analyse von Vergeschlechtlichungsprozessen? *Zeitschrift für Frauenforschung und Geschlechterstudien* 23(1+2): 44-62.

Emons, Pascale, Fred Wester, and Peer Scheepers (2010), He works outside the home, she drinks coffee and does the dishes: changes in gender roles in drama programs on Dutch television, *Journal of Broadcasting & Electronic Media*, 54/1:40 – 53

Esders, Karin (2008), Populäre Medien als »Technologien des Geschlechts«, in Lucht, Petra and Tanja Paulitz (Eds.), *Recodierungen des Wissens. Stand und Perspektiven der Geschlechterforschung in Naturwissenschaften und Technik*. Frankfurt: Campus, 104-119.

European Technology Assessment Network (ETAN) on Women and Science
Science policies in the European Union. Promoting excellence through mainstreaming gender equality, at ftp://ftp.cordis.europa.eu/pub/improving/docs/g_wo_etan_en_200101.pdf (06/28/2010).

Herman, Clem (2009), "It's not the break that's the problem": women SET professionals and career breaks in European companies, in European commission (Eds.), *Women in science and technology. Creating sustainable careers*, Luxembourg: Office for Official Publications of the European Communities, 49-58.

Hirschauer, Stefan (1996), Wie sind Frauen, wie sind Männer? Zweigeschlechtlichkeit als Wissenssystem, in Eifert, Christiane et al. (Eds.), *Was sind Frauen? Was sind Männer? Geschlechterkonstruktionen im historischen Wandel*, Frankfurt/Main: Suhrkamp, 240-256.

Lewis, Suzan (2009), Flexible working policies, gender and culture change, in European commission (Eds.), *Women in science and technology. Creating sustainable careers*, Luxembourg: Office for Official Publications of the European Communities, 40-48.

Sagebiel, Felizitas et al. (2009), How to change stereotypical images of science, engineering & technology? Results and conclusions from the European Project MOTIVATION, *Soziale Technik* 4/2009, 17-19.

Scheer, Lisa & Thaler, Anita (2009), MOTIVATION (WP 2) – Austrian soap opera analysis. Internal Report. Available in members-area of www.motivation-project.com [03.11.2009]

Thaler, Anita (2010a), "Learning Gender" – Das informelle Lernpotential von Jugendmedien, in Rohn, Hanna, Lisa Scheer und Eva Maria Zenz (Eds.), *Frauenin/transFormation – Beiträge zur FrauenFrühlingsUniversität Graz 2009*, Wien: planetVerlag, 115-127 (to be published)

Thaler, Anita (2010b). Informal modes of technology learning and its gender implications. In: Karner, Sandra; Getzinger, Günter [Hrsg]: "Proceedings of the 9th Annual IAS-STC Conference on Critical Issues in Science and Technology Studies", 3th-4th May 2010, (CD-ROM), IFZ Eigenverlag, Graz, 2010.

Thaler, Anita and Jennifer Dahmen (2009), Images of science, engineering and technology – a question of gender? *IFZ – Electronic Working Papers* 1-2009, at <http://www.ifz.tugraz.at/index.php/article/articleview/1621/1/154> (06/28/2010).

Thaler, Anita, Jennifer Dahmen and Cloé Pinault (2009), European media images of science, engineering and technology, *IFZ – Electronic Working Papers* 2-2009, at <http://www.ifz.tugraz.at/index.php/article/articleview/1621/1/154>

Wächter, Christine (2009a): Challenging Cultures of Engineering – How words, concepts, and images (de)construct engineering as a male domain, in European commission (Eds.): *Women in science and technology. Creating sustainable careers*, Luxembourg: Office for Official Publications of the European Communities

Wächter, Christine (2009b), Heiße Kartoffeln und Kalte Duschen. Ein kritischer Kommentar zur Forschungs- und Förderungspolitik im Themenfeld „Frauen und Technik“, in Thaler, Anita and Christine Wächter (Eds.) (2009), *Geschlechtergerechtigkeit in Technischen Hochschulen: theoretische Implikationen und Erfahrungen aus Deutschland, Österreich und Schweiz*, München /Wien: Profil, 17-28.

Weiß, Nikola (2004), *Daily Soaps. Das Geheimnis deutscher Seifenopern*. Düsseldorf: Verlag Dr. Müller

Wetterer, Angelika (Ed.) (2008), *Geschlechterwissen und soziale Praxis. Theoretische Zugänge – empirische Erträge*, Königstein: Ulrike Helmer Verlag.