



**Designing accessible visual digital information for senior citizens:
the role of identification with images and discourse coalitions**

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Abstract

How can we ensure that senior citizens will not be excluded from crucial information in our digitalising society? Digital information accessibility is not only determined by factors such as keyboard accessibility and font size scalability. We need a more dynamic concept than the limited technological interpretation usually applied to the access to digital information. 'Designing for dynamic diversity' (Gregor et al., 2002) could be such a concept. This article discusses how the diverse group of senior citizens identifies with images of senior citizens and the role of discourse coalitions, like the *eternally youthful seniors* and the *frail needy seniors* (Hajer, 1997) in the Netherlands in this regard. Finally, a concrete example from this same country will be provided to show that it is, in fact, possible to make creative use of the various images of senior citizens for achieving an accessible homepage.

Key words: digital information accessibility, older people, designing for dynamic diversity, discourse coalitions

1. Introduction¹

In the majority of the western countries the population is ageing at a rapid pace. At the same time, society is increasingly becoming more digitalised. Information is supplied to a growing extent, and frequently solely, in digital form. It is obvious, that this trend poses dangers for people, like senior citizens, who have problems using such new media. They risk being excluded from crucial information (Duijmel, 2007, p. 7). Digital information, therefore, has to be accessible for senior citizens, but it is often defined too narrowly. So, the Stichting Accessibility [Dutch Accessibility Foundation] (2010, p. 7) defines web accessibility as the 'usability of the internet', applying criteria such as keyboard accessibility and font size scalability. In my opinion, however, digital information accessibility is determined by factors other than these alone. I therefore advocate the use of a more dynamic concept than the limited technological interpretation usually applied to the access to information, especially where a new medium like websites is concerned. Organisations could strive for 'dynamic diversity' in designing their information sources (Gregor et al., 2002). In this paper, I will first argue that using *images* with which a diverse group of senior citizens can *identify* could promote the accessibility to digital information. Then, I will show the role played by the dominant discourse coalition (Hajer, 1997) of the *eternally youthful seniors* towards the discourse coalition of the *frail needy seniors* in the Netherlands in this regard. Finally, I will provide a concrete Dutch example showing that it is, in fact, possible to make creative use of the various images of senior citizens for achieving an accessible homepage.

2. Identifying with images

Even if organisations were to apply criteria such as keyboard accessibility and font size scalability, this does not per definition ensure that information is accessible to all senior citizens. This has to do with the fact that accessibility of information also depends on a factor which generally tends to be overlooked: the degree with which the user can identify with the image invoked by the information provided. Let me illustrate this with the help of a concrete example. In a Dutch study I conducted into the role of images on websites (Loos, 2009), an older woman told me that she was terribly irritated by all the healthy, rich and radiant couples she came face to face with on many websites. She considered these images an affront to single senior citizens who were unable to spend a lot of money or were in poor health. Whether in advertising, informative messages or public information supplied via folders and websites, these images are a dominant feature in our society. In her 2008 essay *Laat me niet alleen - Oud worden in de eenentwintigste eeuw: Hoe gaan we dat doen? [Don't leave me - Ageing in the twenty-first century: The question is, how?]*, Renate Dorrestein ardently appealed against the 'pursuit of eternal youth and what may be termed ageless ageing'.² The cover of her book superbly depicts the phenomenon of ageless ageing, featuring a dynamic older couple with a surfboard in the ocean.

Now, there is undoubtedly a group of senior citizens that is attracted by photos of this kind, but there are also an awful lot who find it impossible to identify with such an image. The question is, what happens when organisations use images of this kind only - on their homepage, for example. Healthy senior citizens with money and a partner are likely to have no trouble identifying with such photos. The picture of a dynamic older couple on a scooter at the top of the homepage of the Dutch 50PlusBeurs, the trade show for over-fifties, in 2010 is an excellent example.³ Under the photo runs the caption: 'A warm welcome to the site of the world's biggest event for active plussers':

'Time to enjoy!' This is the 2010 theme of the 50PlusBeurs. Drop by and discover undreamt possibilities. Learn from the workshops. Look at what the future has to offer you. Get information and advice. Taste, touch, smell and enjoy with all your senses. You'll be amazed at the range of exhibits. Enjoy the shows, indulge and treat yourself. Visit and compare. Enjoy a truly immersive experience at the 50PlusBeurs! [translation]

While this text is fine for healthy, rich senior citizens, older singles in poor health and with little money will obviously not identify with the temptations described, and the chance that they will consult a website with such images and text in search of information is likely to be small. This does not promote the accessibility of a website of this kind for that target group. The size of this group of senior citizens should not be underestimated. The website of the Nationaal Ouderenfonds [National Fund for Senior Citizens] reports that⁴:

In the Netherlands, some 1.4 million people live (in 2005) under the poverty line. This is equal to 8.8% of the population. Of these, 7.2% are aged 65 and up. In total, there are 100,800 people of 65 and over living under the poverty line. (Source: Armoedemonitor SCP 2007⁵) [translation]

This group should also be taken into consideration in the design of information sources, not only in advertising, but also in public information. It is vital that they have access to the information to which they are entitled in order to continue to be able to function socially. Before I turn to the discussion of how to do so, let us first look at why we are swamped by images of this kind, showing healthy, radiantly beaming senior citizens enthusiastically engaging in activities and with money to spend.

3. Discourse coalitions: the eternally youthful seniors versus the frail needy seniors

Hajer's concept of discourse coalition (1997, p. 65) can help us explain the frequent occurrence of images of this kind in our society. He defines a discourse coalition as 'the ensemble of (1) a set story-lines; (2) the actors who utter expressing these story-lines; and (3) the practices in which this discursive activity is based'.⁶



In the case of accessible information, actors such as insurance companies, public authorities, businesses, as well as organisations for senior citizens are concerned with constructing the story of a pleasant life full of attractive activities. In the Netherlands, health insurance company Zwitterleven has contributed strongly to this narrative. Dutch people probably remember the commercial starring Kees Brusse lounging in a deckchair on a sunny beach abroad, reading about the weather in the Netherlands in an English newspaper and then looking into the camera...



Figure 1: Zwitterleven

... and mockingly declaring⁸:

I am afraid that this is going to be a very boring sort of commercial. It seems fair to warn you. So, all of you, go and make coffee, because nothing else is going to happen. Unless you think it's fun to watch me, but that I can't imagine. The weather in Amsterdam [with an English accent]: cloudy, heavy rain [grinning] oh, dear [shakes his head]. [translation]

The message is clear: take out a Zwitterleven policy and you, too, are guaranteed to enjoy your retirement in a similar paradise. In later commercials, the actors responsible for imprinting this story on our minds have become younger and younger.⁹ After all, you can't start too early to start to save for your retirement pension. As the number of senior citizens has continued to rise, more and more companies have started airing commercials of this kind. And it hasn't stopped there. The government, too, benefits if we assume responsibility and start saving for our old age, so that we can live a good life. Senior citizens' organisations have also jumped on the bandwagon with images of dynamic older people designed to appeal to their support base. This looks to be a discourse coalition, and more specifically, that of the *eternally youthful seniors*. This discourse coalition is rooted in a distant past, as the following painting shows:

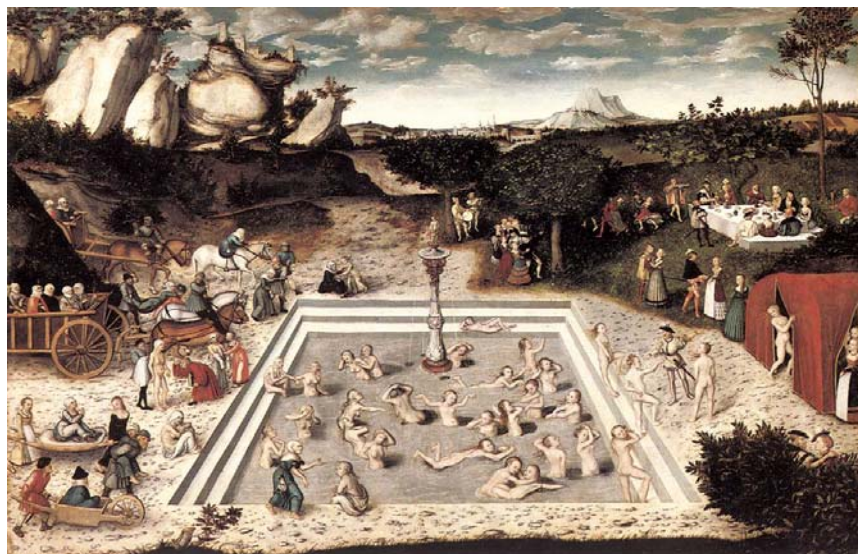


Figure 2: Fountain of Youth (1546) by Lucas Cranach the Elder
Staatliche Museen Berlin (<http://www.wga.hu/index.html>)¹⁰

The Fountain of Youth depicts people (women - what a surprise) standing to the left of the fountain being examined by physicians before entering the water, to emerge on the right-hand side as rejuvenated beauties. This may be interpreted as a myth: 'since myth is a type of speech, everything can be a myth provided it is conveyed by a discourse' (Barthes, 1972, p. 109). The myth in this case is that of 'eternal



youth'. We all want so badly to stay young that we are susceptible to images invoking 'eternal youth'. It is no coincidence that the refrain of a popular song went:

*Forever young, I want to be forever young.
Do you really want to live forever, forever, forever?
Forever young, I want to be forever young.
Do you really want to live forever?
Forever young.*

It is no surprise that this desire is commercially exploited by private organisations, with images that are deliberately chosen to reinforce this myth. However, as I argued above, the public authorities and senior citizens' organisations do the same. There is just one problem: our mortality. This, however, would appear to be solved with the concept of the 'third age', that precedes the 'fourth age' (Laslett, 1991).¹¹ Our increased life expectancy means that we will spend a long time in the 'third age', the period of retirement, while the 'fourth age' will be reduced to a short, painful descent into decay. It goes without saying that the 'third age' receives ample mention in policy memorandums, while the 'fourth age' is quietly ignored. Hence the study published in 2007 by the Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer [Dutch Ministry of Housing, Spatial Planning and the Environment] was given the title *Dynamiek in de derde leeftijd* [Dynamism in the Third Age]. Other examples are the *Verkenning levensloop - Beleidsopties voor leren, werken, zorgen en wonen* [Life Course study], published in 2002 by the Ministerie van Sociale Zaken en Werkgelegenheid [Dutch Ministry of Social Affairs and Employment] and the study entitled *Mogen ouderen ook meedoen* [May Seniors Participate, too] carried out by the Raad voor Maatschappelijke Ontwikkeling [Council for Social Development] in 2004, in which the term 'third life phase' is used. This keeps the myth of eternal youth alive and has allowed a dominant discourse coalition to develop.

Obviously, other voices may also be heard in our society expressing concern about the quality of life in old age. Apparently the Beatles worried about the same thing when they sang:

*Give me your answer, fill in a form.
Mine for evermore.
Will you still need me, will you still feed me?
When I'm sixty-four?*

This opposing view derives from a different discourse coalition, namely that of the *frail needy seniors*. The realisation that ageing comes with decay is part of our heritage and, in the past, was frequently aptly depicted as the so-called 'steps of life':

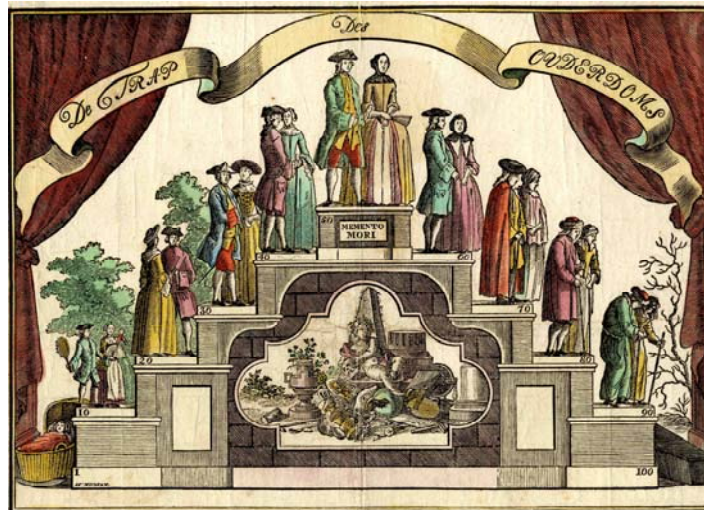


Figure 3: The steps of life, a woodcut by Hendrik Numan (around 1780)



There are also organisations of all kinds that present the less agreeable side of ageing. For example, the publications of the NIZW [Netherlands Institute of Care and Welfare]¹² carry cover images of senior citizens using wheeled walking frames to draw attention to this specific target group.¹³ However, the actors in the discourse coalition of the *frail needy seniors* are no match for the discourse coalition of the *eternally youthful seniors*, as evidenced by a recent readers' survey carried out by the magazine of the ANBO, the largest Dutch association for senior citizens, which revealed that many readers were annoyed by advertisements for Up Easy chairs and wheeled walkers (Van den Berg et al., 2010, p. 11).

Both 'discourse coalitions' invoke violent emotions. Criticism of the *eternally youthful seniors* can be heard from De Lange (2007, 2008) and Dorrestein (2008), while Laslett (1991) has sought to redraw the image of the *frail needy seniors*. My point is the implications of this for the design of information sources for senior citizens. Moreover, it is more than just the visual aspects alone. Just as images can invoke certain associations, use of a certain term can do the same. Consider, for example the terms 'elderly', or 'senior'. But is the use of these words an insult or a term of empowerment? Science is unfortunately not much of a help in this case. I regularly attend international conferences where vehement discussions take place about how to refer to this aged population group: 'older people', 'senior citizens' or 'elderly'?¹⁴ Emotional discussions arise because not everyone associates the same thing with these terms. I have even been present at conferences where use of the word 'elderly' was banned, as a few international colleagues felt this to be derogatory. But are 'best agers', 'happy enders' and 'woopies' ('well-off older people') better alternatives?¹⁵ Or should we prefer the off-the-wall terms coined by Dutch cabaret duo Van Kooten and De Bie: 'oudere jongeren' ['the older young'¹⁶] and 'krasse knarren' ['crusty codgers']? And don't let's forget the new, highly appropriate name for older senior citizens who are active on the web: 'silver surfers' (see e.g. Van Eimeren & Frees, 2008).

The dominant discourse coalition is that of the *eternally youthful seniors*. The narrative it tells has deep historical roots (painting Fountain of Youth) and taps into the universal yearning to live a long and healthy life. Moreover, 'discourse coalitions' are characterized by their strategy of appropriating parts of other 'discourse coalitions'. For example, the Beatles song I quoted earlier is printed on the cover of the policy memorandum *Ouderenbeleid in het perspectief van de vergrijzing* [Ageing population policy within a greying population perspective] published in 2005 by the Ministerie van Volksgezondheid, Welzijn en Sport [Dutch Ministry of Health, Welfare and Sports]. This shows that the government is aware of the fact that thunderclouds may be gathering, but abides by the solution described by the following story-line: there is a problem (ageing), but if we intervene on time and the citizens also take their own responsibility, we can expect a rosy future. The then Dutch State Secretary of the Ministry, Clémence Ross-van Dorp, wrote to the Dutch House of Representatives in the report that accompanied this policy memorandum:

People are in the first place themselves responsible for compensating the loss of resources in later life. Everyone hopes to grow old, so no one can argue that he did not see this coming. For those people who are not capable of taking adequate individual measures for their later life stages, solidarity in society is essential to safeguard the sovereignty of every senior citizen with respect and dignity. [translation]

Stone (1997, pp. 142-143) calls this a 'story of helplessness and control':

'It usually runs like this: "The situation is bad. We have always believed that the situation was out of our control, something we had to accept but could not influence. Now, however, let me show that in fact we can control things."

Story-lines of this kind are a superb illustration of the core elements in a discourse coalition: an actor (a governmental institution, in this case a Ministry), a story-line (the peril of a greying population that may be averted by a timely intervention) and the practices in which this discursive activities is based (description of the measures to be taken). This actor in the discourse coalition of the *eternally youthful seniors* thus, as it were, takes the wind out of the sails of the discourse coalition of the *frail needy seniors*.

Individual differences between senior citizens increase as they grow older ('aged heterogeneity', Dannefer, 1988). This aspect is not always fully appreciated. Kasper et al. (2009, p. 10) rightly note that in market studies:

'the image portrayed of senior citizens tends to be rather one-dimensional. They are either depicted as sick, sad and stuck looking out the window in pyjamas or typified as active bon vivants, wealthy habitués of Zwitserleven beaches. Both are exaggerated stereotypes that bear little relation to reality. Finding a typology of senior citizens that could yield more than these stereotypes would therefore be well worth the effort.' [translation]

To avoid such stereotyping, they present a quadrant approach for typifying senior citizens, as follows: underprivileged and without vigour, underprivileged and vigorous, privileged and without vigour, privileged and vigorous. Another example of a typology using segmentation criteria not based on age can be found in the report *Grijzer worden met kleur* [Greying with Colour] by Brouwer et al. (2005). This report distinguishes four types based on life style: the mentor, the recreant, the volunteer and the dependent. It would be worth investigating whether senior citizens relate to such a typology and, if so, how to tailor the text and images in the information being provided to these different types of senior citizens. It is, moreover, important to examine whether this could enhance the feelings of identification of senior citizens with the way they are being represented, and whether this indeed could make it easier for them to gain access to information.

4. Towards designing for dynamic diversity

The eternally youthful seniors and the *frail needy seniors* are merely two sides of the same coin. The looming danger of euphoria and stigmatisation should be avoided by using a mix of images that do justice to the diversity within the older population group by adopting the principle of 'designing for dynamic diversity'¹⁷. Gregor et al. (2002, p. 152) use this notion to make designers of computing systems aware of 'the decline in the cognitive, physical and sensory function [of older people]'. In this paper I focussed on the role of images for the identification processes of a various group of senior citizens and the implications for accessible digital information retrieval.

Finally, I will now illustrate how the principle of 'designing for dynamic diversity' can be applied to website design. The ANBO, the largest Dutch association for senior citizens, has inserted a bar across the top of the homepage that functions as a photo gallery. Senior citizens from various (ethnic) backgrounds are depicted there, alone and together:

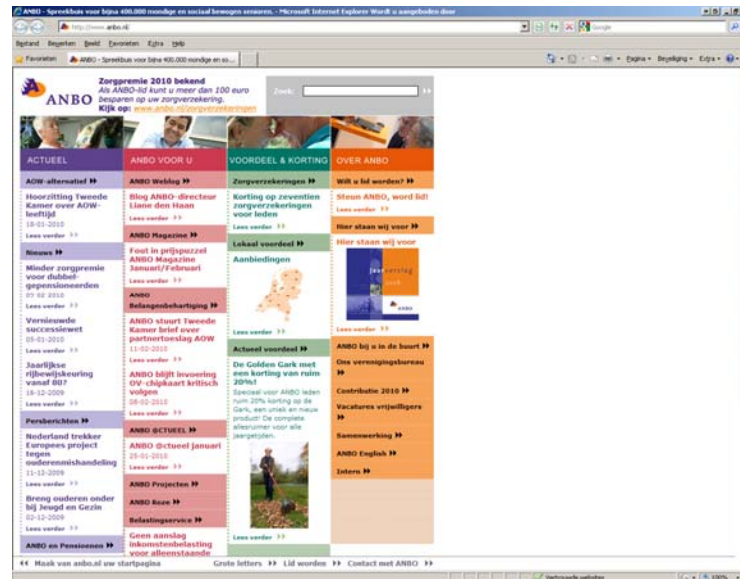


Figure 5: Homepage website ANBO (<http://www.anbo.nl>)¹⁸

The use of this photo gallery is a step in the right direction, but fails to represent the *frail needy seniors*. However, this can be remedied. ANBO asked a photographer for pictures portraying the diversity of the ageing population in the Netherlands. These portraits have been saved in a stock photo file. Adding the next photo from this file to the row of pictures in the gallery at the top of the homepage, would be a respectful way of doing justice to the group of *frail needy seniors*:



Figure 6: Stock photo ANBO (photographer: Bas Moerman)¹⁹

This is an excellent example of the way the principle of 'dynamic diversity' can be applied to website design. Whether or not a photo gallery showing various senior citizens will indeed make it easier for the target group of the ANBO to identify with this organisation would be a good research project within the scope of the special chair in *Old and new media in an ageing society* at the University of Amsterdam.

We must ensure that senior citizens can identify with the image presented in the information sources. It is important that information does not solely project an image of either the *eternally youthful seniors* or the *frail needy seniors*. This could hinder the access of certain groups to information. If we adopt the principle of 'dynamic diversity' in designing information sources, keeping in mind the role played by images in the identification process of senior citizens, we can prevent them from being excluded from crucial information. In this way, *all* senior citizens will continue to have access to relevant information about the services and products that are relevant for them, and they will continue to be able to participate in full in our society.

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¹ This paper is based on part III of the inaugural lecture by Loos (2010). *De oudere: een digitale immigrant in eigen land? Een terreinverkenning naar toegankelijke informatievoorziening* [Senior citizens: Digital immigrants in their own country? An exploration of information accessibility] The Hague: Boom/Lemma.

² Quote on the back cover of the essay.

³ <http://www.50plusbeurs.nl>

⁴ <http://www.ouderenfonds.nl>

⁵ See Vrooman et al. (2007).

⁶ Hajer (1997) conducted his own research into discourse coalitions in the acid rain debate.

⁷ With grateful thanks to Zwitserleven for permission to reprint this image.

⁸ <http://www.reclamearsenaal.nl>

⁹ See Kees Schiferli (1983) on the backgrounds of the Zwitserleven advertising campaign on <http://www.reclamearsenaal.nl/index.php?id=116> and De Lange (2008) for a critical review of the Zwitserleven experience.

¹⁰ With thanks to the Staatliche Museen Berlin for permission to print this painting here.

¹¹ See also Hagberg (2004), Van Tilburg (2005) and Knipscheer (2006).

¹² See, for example *Kwetsbare ouderen in beeld: Informatie voor sociaal-cultureel werkers die vragen en wensen van kwetsbare ouderen in hun werkgebied in kaart willen brengen* (Penninx, 2005) and *De levensloopbenadering: Een bron van inspiratie - Op zoek naar de waarde van de levensloopbenadering voor het welzijnswerk ouderen* (Willems & Alsem, 2006).

¹³ See also the website of Vilans, which offers a wealth of information in this area: <http://www.vilans.nl/smartsite.dws?ch=&id=108065>

¹⁴ See also Weijters & Geuens (2006).

¹⁵ See Bonstein & Theile (2006, pp. 29-30).

¹⁶ Note they are not referred to as the 'younger old'. The term 'older young' shows that 'young' is the standard.

¹⁷ Gregor et al. (2002, p. 152) use this notion to make designers of computing systems aware of 'the decline in the cognitive, physical and sensory function [of older people]'. In this paper I focus on

¹⁸ With grateful thanks to ANBO for permission to reprint this image.

¹⁹ With grateful thanks to ANBO and photographer Bas Moerman for permission to reprint this image.