The Elderly, IT and the Public Discourse. Representations of Exclusion and Inclusion

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Abstract. The paper focuses on the political and institutional trends that foster digital literacy among seniors, and the forms it takes in both the public discourses and the concrete practices of teaching seniors how to use information technologies (IT). IT often recur as an essential element in the discourses that stress the importance of an active, healthy and independent aging, as well as the need for mechanisms that reduce potential isolation and exclusion of seniors. Nonetheless, the inconsistency of these different discourses makes it hard to represent the older people using IT in a clear, convincing and believable way.

Keywords: Aging \cdot Information technology \cdot Digital literacy \cdot Training the elderly in the use of IT \cdot Digital agenda

1 Introduction

Old age, as it exists today in countries with high rates of aging, is not just a biological fact (the increase in individuals' life expectancy, the development of a fourth phase of life between maturity and true old age), or a statistical one (the increased percentage of elderly individuals both in the population as a whole and compared to the total number of young individuals); it is also a social fact (the representation of the problem, for example in the media, the birth of shared narratives of it, as in the cinema or fiction, the construction of socially 'acceptable' forms of longevity, as in welfare policies). If we consider this last point, which we might call the 'social construction of the senior', it naturally becomes important to understand the functioning of public discourses and especially their normative function, capable of shaping the self-perceptions of individuals and consequently their individual and collective behaviour, and how effectively they match the concrete practices of promoting active and socially involved aging, for instance in the use of digital resources.

In this paper we firstly address the problem of the institutional discourse, which in almost all countries with a high rate of aging has the aim of ensuring that seniors are 'healthy, active and independent'. In particular we compare the forms, objectives and reasons for this discourse with those of other public discourses, such as film and literary narrative and advertising practices, so as to better understand its status and possible repercussions. Secondly, we analyze examples of the 'governmental' discourse on Information Technology (IT) literacy among seniors, highlighting points of contact with some empirical evidence arising from research into the use of IT by the elderly

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population. Finally, we study some documents used for encouraging IT literacy among the elderly within social solidarity projects.

2 Aging and Public Discourse

The general aging of societies (especially some, but potentially the majority of societies worldwide) entails a general reorganization of welfare policies, which are central to advanced democracies, and is a problem for all societies [1, 2]. Furthermore, the emergence of a new age, caused by increased life expectancy, is generating new subjective sensibilities, so that we can say that the current generation of young seniors (people in the 60/65 to 75/80 age group) is living through a personal experience (a degree of wellness, generally satisfactory health conditions, and a complex network of generational relationships that comprise children and grandchildren on the one hand and in some cases very elderly parents on the other) that is largely unparalleled in earlier periods among people of the same age [3, 4, 5].

The two situations (private and public) have naturally become the subject of public discourse on various levels that reveal a significant breakthrough in recent years [6, 7]. Here we point out three, which we believe are helpful to understanding the collective adaptation to the aging society. First, the literary and cinematic narrative, which customarily has the task of representing potential problems by relating them to the experiences of exemplary protagonists; secondly, advertising campaigns, which are aimed at certain target groups and represent their patterns of life and consumption; finally, the political/institutional discourse, through which lawmakers and administrators justify and implement policies for the citizens directly or indirectly affected by them and the citizenry in general.

The literary and cinematic narrative insists increasingly on old age as a new opportunity; this is the case with films like *The Bucket List* (2007), *Up* (2009), *Youth* (2014), The Hundred-Year-Old Man Who Climbed Out the Window and Disappeared (2013). If these examples are compared with other earlier forms, one immediately realises that the elderly whose functions were largely narrative (and not active), being mainly oriented to the past (of which they were the guardians), and often described as being weakened or withdrawn, have been replaced by the images of seniors who decide to start over and have new experiences. Advertising targeting old age also reveals significant changes. While it is clear to advertisers and their clients that their target requires specific attention (for example, the adoption of traditional media rather than the new digital media, the use of clearly visible print and so forth), making allowance for the elderly consumers' real infirmities, the representation of seniors has changed in at least two ways: first their image is increasingly youthful (through endorsements by celebrities or actors who are actually youthful-looking or in fact younger than the characters they play); secondly through the use of paradoxical narratives that describe seniors as still intent on forms of consumption and pastimes (such as sports) that attest to their good physical and mental shape. The two types of public discourse presented above – although showing significant changes in their ways of representing the new Seniors - does not yet significantly incorporate the use of IT by seniors, at least in Europe. This can be seen

as a minor contradiction, because in public discourse IT is the quintessential symbol of inclusion and integration, and therefore it calls for an explanation why, while we tend to represent seniors in their gradual integration into social life, they are not yet represented as actively using IT. There may be two reasons for this lack of representation: first, the relatively small percentage of seniors who are currently computer literate out of the total target of the elderly; the other is the social stereotype that presents seniors as digital immigrants, not entirely at ease with the new technologies [8].

So, even though the research suggests a growing tendency among seniors to use IT [9], in the narrative and advertising that targets them, they still do not appear as IT users.

The governmental discourse is different, since it includes legislation and administrative practices that foster the use of IT by Seniors. Here we find general discussions that stress on the one hand the importance of an 'active, healthy and independent' image of seniors, while on the other it insists on the need for mechanisms that reduce their potential isolation, and overall exclusion (in this sense the discrimination against older people is comparable to that based on gender, ethnicity or status). In this case, as will be seen, IT often recurs as an essential element in the inclusion of seniors, together with the significant outlines of policies to promote the use of IT by the elderly.

The next two points will seek to show respectively some key points of government policies that envisage digital inclusion and the actual practices of inclusion, carried out as part of lifelong learning.

3 Policy Discourse, Digital Skills and Their Indicators

Our first examples of representation of the 'digital elderly' come from the area of the European policy documents. Such documents, both as a general framework and specific recommendations, contribute to the social construction of the old people facing the IT in a very effective way, since they are the premises for the – more or less consistent – government projects addressed to the elderly. Research on this topic [10] has already shown the presence of a new 'digital divide rhetoric' focused on a deterministic view of both aging and IT. While the old age is often represented as a period associated with risks of exclusion, isolation, retirement, disability and cognitive deficits, IT seems to offer the possibility to reduce older age related problems, fostering a more autonomous life and cutting public costs for welfare.

We are here referring to some documents from different international institutional sources in two relevant frameworks: 'active aging' and 'digital agenda'. In the first case, IT access and use are seen as tools for fostering e-health and healthy aging; in the second one, they are seen just as preconditions enabling consumption of goods and services of the 'single digital market' that is the horizon of the European Digital Agenda.

In both the frameworks, there are two major concepts: 'digital literacy' and 'digital skills. They are, at the same time, a criterion by which the digital divide of the elderly can be measured and the goals of the policies can be addressed to them. Since only the 'digitally literate' older people would have the competences to benefit from digital technologies for active and healthy aging (as well as to access the digital market), the criteria to evaluate digital literacy and skills tend to become normative.

Our aim is to account for the plurality of the criteria used to assess digital literacy and skills among the elderly, in order to show how they are socially constructed; behind the adopted indicator is thus possible to see some implicit considerations about IT and aging.

A first example is the Active Aging Index (AAI), 'a tool to measure the untapped potential of older people for active and healthy aging across countries. It measures the level to which older people live independent lives, participate in paid employment and social activities as well as their capacity to actively age' [11]. Adopted by the United Nations Economic Commission for Europe (UNECE) and the European Commission's DG for Employment, Social Affairs and Inclusion (DG EMPL) in the policy framework of 'Social investment' designed to strengthen people's skills and capacities and support them to participate fully in employment and social life, with a peculiar focus on the elderly in order to give them more opportunities for an active participation in society and the economy, the AAI consists of twenty indicators in four different areas: Employment, Participation in society, Independent, healthy and secure living and Capacity and enabling environment for active aging. The last one includes the use of IT as an indicator taken from the Eurostat ICT Survey. As reported in the official website of UNECE, 'This indicator aims to measure the degree to which older people's environments enable them to connect with others with the help of information and communication technologies, thus reflecting one aspect of their capacity for active aging [...] The question refers to internet use at least once a week (i.e. every day or almost every day or at least once a week but not every day) on average within the last 3 months before the survey. Use includes all locations and methods of access and any purpose (private or work/business related)' [11].

Irrespective of the actual online practices, their goals or motivations and social context, the pure and simple frequency of use is thus considered as predictive of social inclusion and active aging. As stated in an explanatory note, 'larger number of older people using the internet points to a higher ability to communicate with others, and engage actively in society. While excessive use of the internet can be detrimental to one's health, such phenomena have been observed mainly for younger people thus far. It is therefore reasonable to associate the use of internet among older people positively with their capacity for active aging' [12].

A very different example comes from Europe 2020 Strategy and its Digital Agenda, whose main objective is to develop a 'digital single market' in order to better exploit the potential of IT, to foster innovation and to generate smart, sustainable and inclusive growth in Europe. It is made up of seven pillars, and two of them are interesting for our analysis: Pillar VI (Enhancing digital literacy, skills and inclusion) and Pillar VII (ICT-enabled benefits for EU society). While Pillar VII mentions e-health and IT for aging well as a strategy to provide European citizens with better and cheaper services towards a new 'silver economy', Pillar VI aims to tackle the digital divide.

As far as the digital literacy is concerned, the Digital Agenda of the European Commission (EC) acknowledges the need for every citizen – elderly included – to have at least basic digital skills in order to live, work, learn and participate in the modern society. But what does 'basic digital skills' actually mean? How to assess them, in order to develop them?

In the Digital Agenda Scoreboard – a tool used to measure the progress of the European digital economy – some of the Digital Economy and Society (DESI) Index indicators [13] concern individual digital skills on the basis of the following areas:

- Information skills area: Copying and pasting files or folders. Getting information from public authorities/services' websites. Finding information about goods or services. Reading online news/newspapers/news magazines.
- Communication skills area: Sending/receiving emails. Using social networks. Audio/video calling in the internet. Uploading self-created content to any website to be shared.
- Problem solving skills area: Transferring files between computers or devices.
 Connecting and installing devices. Installing a new or replacing an old operating
 system. Online shopping and banking. Making an appointment with a practitioner
 via a website.
- Content creation skills area: Using Word Processing Software. Using spreadsheet software. Creating presentations or documents integrating text, pictures, tables or charts. Creating websites or blogs. Writing a code in a programming language.

It is noteworthy that these indicators merge computer skills and internet skills, taking for granted that the PC is the main device to access internet (irrespective of the amount of internet users accessing through smartphone or tablets); the indicators also refer to some age-specific activities, but mix different ages (e.g. 'using social networks' and 'making an appointment with a practitioner'). Together with other DESI Index indicators – such as 'Persons employed using computers at work' or 'Individuals who have obtained ICT skills through formal educational institutions' – the individual digital skills assessed by the Digital Agenda Scoreboard turn out to be consistent with the horizon of the 'digital single market', but somewhat indifferent to 'social inclusion' or 'active aging' of the digital elderly.

While the Active Aging Index assumes that having an internet access enables – by itself – the elderly to participate in the network society, the DESI Index indicators describe the 'basic digital skills' assuming, in a normative way, that some online activities have to be equally performed by different age groups. In the first case, indicators do not take in consideration the actual use of internet; in the other one, they take in consideration some not age-specific uses. In both cases, the indicators seem to be inadequate, and contribute to construct a non-realistic social representation of the elderly, as either automatically included, or irremediably meant to be excluded from the digital environments. Thus, it is probably no coincidence that the number of actions addressed to the older people encompassed by the Digital Agenda framework is very low; for example, in the Italian section of the Grand Coalition for Digital Job – a multi-stake-holder partnership led by the EC to tackle the lack of digital skills in Europe – only 4 out of 68 action projects involving citizens are focused on the elderly, even if Seniors, together with people in the southern regions, are considered as the most disadvantaged national targets [14].

In the next point we are going to analyze an example of such projects.

4 Writing in the Education of Seniors: IT as a Cultural Object

In Italy, as in other European countries, digital literacy courses for seniors took off in the Eighties, in the context of voluntary activities aimed at reducing the digital divide. The objects used in these courses have gradually changed: first standalone computers and the use of their software (mainly the MS Office package), then gradually Internet and today the Web and services. Then their teaching methods have also varied. What we want to analyze here is a rather widespread occurrence, which could be called the 'grandparents and grandchildren' model, namely the involvement of children and youngsters in assisting the elderly in their digital learning.

In particular, we analyze a program coordinated by Fondazione Mondo Digitale (FMD) that is called Grandparents on Internet (GOI) [15]. It has been running since 2002, involving government institutions and schools, and in 13 years has completed courses for 25,700 seniors (those over 60, of whom about 65 % are women), conducted by 18,600 students tutors and 1,800 teacher coordinators.

To analyze the type of program conducted, here we will examine the three manuals used in the course, including one for older course members, one for student tutors and one for teachers.

The three manuals are part of the documentation that reflects the many years' experience of training. Hence they are not just practical guides but excellent material for understanding the results and achievements of the program, including feedback from participants.

In particular we will focus on the following points:

- 1. the purpose of the program;
- 2. the content and structure of the courses;
- 3. the method: identifying of the strengths and weaknesses of the elderly in learning to use IT.

4.1 The Purpose of the GOI Program

The documents analyzed here clearly reveal that the objectives of the program are twofold. On the one hand they are intended to make the elderly digitally competent. On the other (and this seems the true aim), they seek to reduce the risk of the elderly suffering from exclusion.

The teachers' manual accompanying the courses states: 'Digital literacy among those sectors of the population at risk of exclusion from the benefits of the knowledge society is essential for the dream of an inclusive knowledge society.' Hence digital literacy is crucial principally as creating 'a knowledge society', which will reward those with access to knowledge and exclude those without it. In illustrating the programme's objectives, the manual states that computer usage is increasingly essential 'in order to participate effectively in the social life of the community (neighbourhood, city, country, world), to communicate more fully and better with all and to use important services online.' On the basis of these aims the program provides for the active involvement of children and young 'digital natives', who are invited to become 'knowledge volunteers':

'Being a knowledge volunteer means exactly this: I put myself at the service of others. I fill my backpack with things I can do or that I like to do and I pour them out for other people, explaining what I do to them. We young people are a generation highly skilled in using the new technologies. Those of us with younger siblings realise they are even more advanced in their ease of understanding technology than we were at their age. [...] The invitation is very real: go to your neighbour and show them how to log on to Internet. Go to your grandparents and explain how they can keep in touch with you on Facebook. Help your parents find their classmates by using the social networks. [...] In short, get cracking. Today, now, at once. There is a huge need to spread digital culture in Italy. A culture that goes beyond simply being glued to Facebook and similar sites. A culture that doesn't just say "Learn to use the computer because otherwise you're not worth anything".'

4.2 Contents, Objectives and Structure of the GOI Courses

The courses last 30 h, divided into lessons of two hours each held once or twice a week. Classes are held in a multimedia classroom, equipped with computers and other hardware (printer, scanner, projector etc.). The skills to be attained in the various courses cover mainly computing (there is no mention of literacy in the use of tablets or smartphones) and include: using a word processor (e.g. Word); using Internet and email; doing calculations (e.g. with Excel); computer drawing (e.g. with Paint); downloading and processing digital photos (e.g. with Picture Manager); writing presentations (e.g. with Power Point); speaking on Skype.

In practical terms, the seniors sign up for a course that interests them, or that they think might be useful. In this course they will have a teacher who explains the content and a child or youngster who concretely helps them carry out the necessary operations using the various programs on the computer.

The presence of the child-tutor is a typical feature of this type of program. It is based on a kind of new generational contract in which it is no longer only the elderly who teach young people, but in some areas, especially technological ones, it is rather the young who have more experience and expertise than the elderly. Moreover, a practice of this type is also educational for children and adolescents, because it shows they can play a publicly useful part in society. Finally, programs of this kind also perform a social function, as they tend to create links across generations which reduce the isolation of individuals and expand the network of relationships. This, as various studies have shown, is particularly useful for improving the general quality of life of the elderly.

4.3 GOI Method: The Elderly's Strengths and Weaknesses in Acquiring Computing Skills

The method these courses adopt lies essentially in integrating the teaching provided by the teacher in the classroom equipped with computers and the tutorship function performed by the young 'knowledge volunteers' who act as 'personal teachers' of seniors. The manuals, from this point of view, constitute a highly interesting material for understanding the concrete difficulties involved and the strategies gradually developed to overcome them. They contain clear indications of both, developed for the three types of readers of the manuals: teacher-technicians, very young tutors and senior learners.

Teachers, for example, are recommended to adopt a combination of rigid and flexible programmes. Rigid, because of the plurality of learning situations (a single class may include seniors with different digital backgrounds). Flexible, because the differences in starting levels may require the objectives to be organised for different subjects.

The manual for the young tutors, however, contains some advice about behaviour that always starts from real situations, observed during extensive experience of the courses:

'Seniors [...] might be irritated if a tutor strikes them as rude. Don't expect to get on close terms at once with seniors, but wait for them to trust you and recognise your role. For this reason, you should always be courteous'.

In the manual addressed to the elderly, finally, we find an interesting way to illustrate the skills that will be taught. They are exemplified by possible objectives, so relating to the non-technological needs of the elderly in their everyday lives: 'writing documents (letters to the administrator of the condominium, requests for services from the council, etc.). quickly and with a pleasant layout, without having to rewrite everything all over again in the case of changes or corrections (as was the case before with typewriters); keeping household accounts automatically and tidily;... writing original and personalised greetings cards (with drawings, images, colourful speech bubbles) for birthdays, festivities or just as a surprise for your grandchildren.'

These strike us as good examples of the promotion of digital learning based not on technological performativity, but concrete needs, very close to the public in question, and bringing out the practical uses of computing, both to improve their ability to achieve something and to take advantage of the new services.

The advice includes further suggestions for coping with potentially difficult situations during the course:

'The tutor, trying to explain something more clearly, takes over the mouse and keyboard and takes your place, leaving you to look on and feel discouraged. You ask for an explanation and the tutor explains, you ask for a further explanation of certain points and the tutor explains them in much the same way as before... Hence it is essential for you seniors to understand the difficulties and the effort that tutors make in carrying out their important and delicate function. So try to be patient and understanding with them'.

In summing up this analysis of the concrete experience of teaching computing to seniors, we can say that

- though based on assumptions rather typical of the emphasis placed on computing as
 a favoured instrument for inclusion, it mediates these assumptions with the need for
 social rather than technological inclusion, based on intergenerational interaction and
 the teaching-learning role of young tutors;
- while setting technical objectives, the GOI program takes into account the basic difficulties of seniors and their age-related attitudes and habits;

• the computer remains at the core of the literacy process, with little interest being shown in smartphones and tablets.

5 Conclusions

In this paper we have shown some examples of normative social discourses about aging and IT. On the one hand, fiction and advertising represent the 'new' elderly as a subject still active, socially integrated and open to life. Addressing to the older people as their target, this kind of discourses contribute to the social construction of an idealized representation of aging; nevertheless, they usually avoid to represent the elderly as IT users.

On the other hand, policy documents take on board the matter of IT diffusion amongst the elderly as a resource for their social integration. Two kinds of discourses have been analyzed: firstly, the normative representation implicitly or explicitly embedded in the indicators adopted to assess digital literacy and skills; secondly, the discourse of a project aimed at achieving the goal of digitally literate seniors.

Our analysis of such discourses highlights several problems. First of all, the inconsistency of these different discourses makes it hard to represent the older people using IT in a clear, convincing and believable way. A further analysis of the most common stereotypes would probably be very useful in order to produce a more efficient public discourse.

There is also some ambiguity about the reasons why the elderly should be digitally literate, due to different frameworks; while the Digital Agenda fosters the participation in the 'single digital market', either or welfare costs cutting, active aging and e-health policies focus on social inclusion and wellbeing. As a consequence, different digital capacities and skills are requested, assessed and proposed.

Another critical point is a 'technocentric' approach, with the consequence of stressing the central role of the personal computer and its technical features instead of the need, interests and social practices of the users. On the one side, this approach understimates such devices as tablets and smartphones, becoming ever more common among the elderly; on the other side, it results in the disregard of subjective elements of the 'age digital divide', such as personal motivations [16].

Finally, in a more general perspective, public discourses aimed at social inclusion of the older people through digitalization should better balance the fostering of technical solutions with the offering of a more integrated plurality of services, both online and offline.

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