

LEARNING IN THE NEWSROOM: media infrastructures and the invisible work of technological learning among journalists

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ABSTRACT It has become common place to claim that technological innovation has radically transformed the world of journalism. While the end-products of this change are visible, the work spent by journalists to make sense, understand and use the latest media infrastructures, technologies and standards is both an under-researched and rich ethnographic object. How do the changes in journalism affect the news workers de-skilling or re-skilling processes? How do news workers deal with the period of training? I draw on participant observation among journalists from two niche TV station in Bucharest, Romania. One of the stations has recently bought up to date equipment from abroad and asked its journalists to attend online training sessions via Skype. I describe how mundane technological and learning failures undermine the grand promises of new technological change, creating struggles over meaning, routine and infrastructural mastery. Digital transformations have generated multitasking journalism and lead to a new way of doing this profession. This means that journalists practice a variety of technological skills, emotional work and cognitive tasks. If the traditional newsrooms needed to do more with less, now, the journalists are continuously trained to acquire and operate with the latest technologies.

Keywords: technology, media infrastructures, deskilling, reskilling, multiskilling, ethnographic journalism, Post-Fordism

1. INTRODUCTION

Football field. Match day (20.03.2017). The cameraman is looking for an optimal light frame. Makes two images and microphone samples and gives some tips for the reporter that is standing in front of the camera „Keep your neck straight and give the camera a little smile”. The reporter is reading with loud voice the notes written on a bended piece of paper. From the headset the producer takes the turn: „There are four minutes left... attention! You are on AIR!”

The focus on the present article is related to the changes that TV journalists from Romania needed to face in recent years once with the advance of technology and the need of information to be delivered more and more quickly. Moreover, the small number of specialized media employees has led to *multitasking* and advanced *technological learning* changes that I'm going to talk later on.

The present article is organized in the following way. In the first section I offer a broad overview of the changes that Romanian TV journalists went through in the last two decades, focusing on the emerging challenges and appropriation of technology. In the next section, I describe the changes occurred in the infrastructure of a television, the importance of physical space, the everyday work process, routines and followed standards in the processes. Then, I focus on multitasking, the way new abilities are formed, periods of training, stress and inefficiency. In the conclusion I suggest that studies of journalism need to pay increased attention to technology in order to better understand the changing landscape media production.

My research is located at the intersection of social studies about infrastructure (Simone 2004, Edwards 2007, Ribes 2009, Hochman 2010), standards (Kahin 1995, Graham 2007, Star 2009, Busch 2011) and studies about television (Parks 2006). I have answered questions such as: What challenges do journalists experience in the incorporation of new technologies and infrastructural standards in their daily routines? What processes of de-skilling and reskilling do they experience? How did data gathering, production process, editing and broadcasting have changed in the past years?

In order to answer my questions, between 2014 and 2018, I carried out participant observation among journalists and other TV employees. I spent time in the technical and production departments, newsroom and even on the field, at football matches. I've often left their physical space (e.g. editorial, stadium) and went with the workers at a coffee or wherever they moved their working area as the physical space doesn't matter so much anymore once with the technological change. Along with the long-term participant observation done for a period of 3 years I've done about 28 interviews, both formal and informal. Sometimes, I would make arrangements with reporters to follow them on set days, but generally, I did not pre-arrange who I would be walking with on a given day, as the unpredictable nature of news work meant that staff did not feel able to make such arrangements. I've also collected different types of other data such as photos and instruction manuals, in order to see how journalists deal with the technical language. I also paid attention to the incompatibility and non-compliance with standards, professionalism, as well as the blurred boundaries between television and the Internet, all these issues were observed and analyzed during my research period.

My research field was composed of two niche broadcasters in Romania. Although, I did follow the activity of other TV stations and talked some of their media employees but my field work remained only in two of them as I have gained access there. Together, they have hundreds of media employees, whose labor functions are mostly divided between journalists, news producers, editors, video producers & montage, TV commentators, voice over and camera operators. One of the TV stations, A TV¹, targets people interested in agriculture, while the other one, K Sport, targets the public interested in sports (e.g. football, tennis, handball etc.). Both of them have their offices and newsrooms in Bucharest and have in common the acquisition of technologies in recent years (2010-2014), programs, hiring people, trial periods, stress, critical apparatus and other difficulties were part of the change process. I have faced several challenges during my research period as not all my potential informants felt on their ease. This is the reason why the TV station personnel was reticent in disclosing certain information, especially

¹ These are not the real names of the televisions as those whom I've discussed wanted to remain anonymously

the one related to the conflicts between some of the employees, conflicts related to the fact that some of the journalists were receiving a special attention when the tasks were divided. Some of them received easier tasks and this situation had occurred several times depending on their relationship with their leader (e.g. going out with them to a coffee or even having romantic relationships). Another problem was the access to other televisions, because the protocols are bureaucratic and some of the Human Resources Directors seemed to be reticent at the idea of doing this kind of research. They excused themselves by telling that they needed to discuss the proposal during their weekly meetings but, even so, the responses were delayed and motivated by the difficult period that they were going through (e.g. too much work and not having the time to receive me and supervise me as it is required by their intern protocol). Another problem with which I have been confronted is the technical language used by the specialists of the IT department because I didn't understand their jargon and they weren't willing to initiate me or answer all of my questions as they were usually constrained by time pressure. At the beginning of my research, I also had to find plausible explanations for the employees which asked me about my presence there. In general, they were curious why I put some many questions and why I want to know all the boring stuff about infrastructure and technologies thinking that is not a subject that would usually interested a girl. I've explained myself by telling them that I wanted to work in a television and that I think is normal to know all the information related to it, starting with the infrastructure and the way a television works and faces changes. Although it was hard, in the end I've persuaded them to initiate me in their work.

Contemporary media organizations substantially value a range of skills necessary to adapt in the modern digital world. But the experience of learning new skills can be difficult for some of the journalists that are concerned with the idea that change means periods of stress and instability especially for those that aren't willing to overcome their limits. I'm exploring in this paper the everyday routines and the way journalists are behaving in relation with the new technologies, the new demanding skills and ways of doing modern journalism. No longer than 10-15 years ago Romanian TV journalists were more present on the field, collecting information, finding the sources, talking with the people, in short, being present at the scene to take the pulse of information. Today, they spend most of their time at their desk, searching and writing on their PC program and communicating online with sources (e.g. contacting or stocking them on social media). These changes occurred once with the digitalization media which meant that the processes were done mostly online without needing direct contact.

Currently, often times, in all the TV stations observed even the interviews are carried out by e-mail, face time or Skype. One major cause is the intense need of fast information, usually delivered on Facebook, Twitter and other social media and after with a delay of a few minutes delivered on TV by *breaking news*. Office journalists often find the breaking news by following celebrities or important informants on social media and immediately take the most important statements and transform them into news al deliver them on TV and online.

Often, the journalists from K Sport use Google News, an application that brings the latest news via email, thus, eliminating the effort and time that the process of individual searching implies. Another way how the technology can be used is to communicate directly with the sources. In this case the most useful applications are Facebook messenger, Instagram and WhatsApp, which makes it easy for both of them. But the use of email isn't a new tool in the work of journalists as one would think. Even so, the usage was perceived differently by journalists. As Fishman (1994: 36) explains, "some beats were more inclined to deploy the e-mail in their news making practices than others, precisely because sources differ as to where they can be located; at what time they are available and by what means they may be tapped." In some cases some institutions regularly send e-mail alerts to journalist, which sometimes

provide story, ideas and leads. As K TV journalists say this possibility gives them more time to focus on other aspects such as focusing on the way the news needs to be transformed for TV and not stressing for searching new ideas of news. In the opinion of Pavlik (2000) for some journalists, the digital world and social media has become an empowering technology proving readers with an opportunity to engage directly with the journalists on issues they research. The journalists use often social media because is more easily than meeting with the sources. Also, an advantage of e-mail technology is that it constitutes a record and also a proof of the interview. In this way the source can't say that the issues were fabricated or the journalist misquoting them.

2. CHANGES IN THE NEWSROOM: SYMBOLIC SPACE AND NEW SKILLS

In the following section I'm going to talk about the transformations which journalism has gone through in the last 15 years, the ways of doing the profession of journalism, the process of acquiring new abilities, new work spaces and the new symbolic signs that define the working process.

Romanian journalism has gone through several stages of transformations up-grading of the operating equipment, mirroring changes taking place elsewhere in the world. One may say that 10-15 years ago the division of labor was sharper. More than that, each employee knew very well to perform a single task or mostly two as their work was clearly specialized on specific tasks. The journalist specialization today is characterized by multiskilling and being adaptable, always on track. Production skills such as writing, photography or editing are giving journalists more information to their knowledge structures but the production skills „are secondary to the more primary skills of analysis, evaluation, grouping, introduction, deduction, synthesis and abstracting” as Potter also finds in his research (2004: 59).

In the TV stations that I've studied the management expected journalists to have skills such as: autonomy, efficiency, multi-skilling, good communication with colleagues and tear down the boundaries between professional and personal time. Key among this discourse of change and responsibility is the expectation to master technology, be able to fix technological errors, and to understand the need for change.

In some countries (e.g. Germany, Sweden) television companies already said goodbye to the old buildings and moved into open offices where the breaking news operations can be done continuously. For some of the Romanian journalists the space doesn't have barriers which means that they can do their work wherever they want to as long they have the technology needed and with the serious condition to deliver the material on time. An example of Romanian television is A TV where the employees can do their work by home or other spaces such as coffee shops. The idea of this way of working is that if the tasks are done and the quality of the final product is the way is expected, then the space doesn't have an important significance. However, this is available for the small TV stations as they don't really their work on significant apparatus and they don't need complex technology to do their work (e.g. the reporter can post by himself the information on the site or can create a video material by using the phone and afterwards posted it on site or social media). The symbolic space is understood as the place where journalists have their official working offices still matters for the journalists with many years of experience and that's why they find it difficult to work from home and prefer to remain in the television building. They say that the newsroom gives them power, grows their ambitions and directs their road to information. Face-to-face communication makes them faster and more responsive to tasks and also their feelings and state of mind can be shared together. The need

for newsroom perceived generally as for practical purpose is perceived as more for some of the journalists as they need to have a work space and interact with others, make change of opinions and share feelings. Also, the tools used in the newsroom become more sophisticated, the technology changed, which means new laptops, new configuration of the newsroom, microphones, large TV screens. The new programs and communication technologies have created a difficult time for journalists because they had to adapt and learn to use them. The newsroom of a niche TV company focused on sports, K Sport looks like an open space where journalists, editors, TV presenters and producers work together in order to create the final product. Only two TV producers are working on an iMac, the others are using older laptops but the other technologies such as writing programs, sound recorder machines, cameras and even the studio design meet the latest standards.

From historical point of view, the profession of journalist has undergone changes such as removing certain abilities that are no longer needed with the technological domination. The new requirements have encountered resistance from some journalists, a fact due to the lack of training in the usage of new technologies and tools. In many cases the digitalization process was delayed because the owners of the media outlets were not able to invest in technology. The journalism has become more commercializing: The concept of commercialization according to Ornebring (2009: 7) brings changes to the work structures: "general deregulation of labor markets, proliferation of short-term contracts and other forms of flexible employment, technologization of the workplace and concerns over de-skilling of parts of the workforce. As noted, these changes affect journalism too, and in different ways affect the relationship – or balance – between occupational and organizational professionalism".

Even though some of the employees have a bad opinion about this way of doing things arguing that they need to feel safe and to communicate face to face with the others not by phone or WhatsApp. Moving from one building to another may cause periods of ineffective work because of the existed routine and work habits. There are situations when some of them are missing their desk, some their laptop that was slowing the process of making news and some the old and dusty elevator in which they were trapped almost daily. All these remain only memories as journalists are rapidly adapting to the new practices and technologies. Technological innovations have produced significant changes in the newsroom. These innovations brought new practices and most importantly a new way of looking at the psychological work space. The amount (and size) of equipment that needs to cover news has decreased, also the number as journalists once the technology can replace their work. But this isn't the only reason that has led to the low number of journalists. Nowadays students and young adults have high expectations related to the work conditions as they are wishing for high income from the start and fixed schedule. They aren't longer attracted to this profession as they aren't willing to dedicate their entire life to it. Still there are some media professions that are in the center of attention (e.g. TV presenter, reporters, commentators). The attention given to them is due to the idea of celebrity that gravitates around it. The reason is related the fame received, being in the center of attention, gaining fans and even being considered sometimes an opinion leader.

No matter if we are talking about reporter or cameraman, generally, media employees need to deal with a major technology evolution as their current workplace is filled with technologies that can perform faster and faster, always upgrading. For example, Marian, cameraman for at least 10 years says that the cameras used in the present are more easier to manage as you don't have to wait so much time to transfer the information or to worry that you don't have enough memory (e.g. using cards instead of tapes): „Before the change I was filming on a small camera and now I have this big camera, a Sony camera, that in my opinion is the best choice. We are filming on cards and this is a big evolution in terms of time consuming”.



CAMERA – the most significant instrument that keeps the proofs and manages to make the connection between presenters and audience

Even if today the work of journalists is facilitated by the Internet and faster technologies this doesn't mean that they use it at maximum capacity and take advantages from them. Grabowicz, 2003, Haas, 2006, Lasica, 2003 argue that journalists are experiencing advantages of Internet by using it in their daily work, gaining time saving, improving accessibility, and the use of applications. Garrison (2000, 2003) studied the way journalists are using the tools of Internet and concluded that journalists have reservations about the credibility of Internet information, as the often-uncertain information makes verification more difficult. One reason as they remarked may be that they are still tied to the newsroom, working with others, being a team and discussing the findings and the news. In Romania, the journalists that I interviewed said that were reluctant in accepting the Internet as a credible source of work citing that the ethic of journalism does not allow such a source. For instance, Radu, a news reporter believes that by using the information from the web one may risk to give false news or half trues: „you hurry to be the first to offer such information and you don't have time to check it because of the fear that somebody else will release online the information and that's why „you always need to be the first”.

With the evolution of mobile technology it is easier to film or record an event or situation and also that product to have a good quality that can be transferred in real time to the editorial. This situation is encountered in the case of journalist that works for companies that are financial poor supported. For the people whom I studied physical space have different meaning as I described above. They have learned some rules that now are being changed

because of the evolution of technologies, the need of distributing information faster, the change in how journalists work and the quality of the final product that will be delivered to the public.

3. THE EVERYDAY WORK AND ROUTINE PROCESS

In this part I will discuss about the challenges that journalist confront at work regarding new ways of dealing with technology in developing new skills and abilities. It is important to understand the place of journalist in the field, the competences achieved, the authority owned in the field, what rules and standards to they follow. As Singer (2004: 839) says „identification with a particular medium is part of formative educational and professional processes for many journalists”. Only for a small part of the media employees studied working with professionals is important as the majority is focused on maintaining their job and is slightly preoccupied with their professional evolution, another reason that explains their reticence towards new work practices.

The journalism is transformed in many ways. Starting with the nature of news which means that the stories are written much faster because of the lack of time and the quality is decreasing as they can't concentrate their attention. Pavlik (2001) found some ways in which journalism is being transformed and this ways can be also recognized in the work of Romanian journalists. The appearance of new media technologies has change the nature of news content and also the newsroom has been going to a fundamental transformation.

In the TV stations that I made my research journalists are constrained to adapt and sometimes do the work of video editing specialists or even camera operators. The new and modern journalist needs to cultivate their abilities and skills in order to operate with the latest technology as transformations and changes are taking place. It's interesting to analyze the relationship between employees and the apparatus used. From laptops, camcorders, recorders up to graphic programs for the ingestion of news, all requires a very good know-how by the user, so that the time lost because of errors to be reduced and the quality of the finished product to be as good as possible. But even with a good knowledge of the timing of the use of appliance, breaks and errors are unavoidable, in which case the equipment is to blame, often being required to change it with more efficient ones.

Also, the mobility of journalists has increased along with the camera miniaturization. Today live broadcasting is much easier and in the near future “reporters will be able to send high-quality television pictures from a cell-phone-sized camera” (Gans, 2004: 108). In his book, *Deciding what's news (2004)*, Gans explores the professional commonalities across the media, how the news are made, what journalist choose to pick as and call news, the conformity of journalists, and the influence of nationalism in writing the news. The production skills as writing, photography, acting, directing, editing, and sound recording contribute to the knowledge of structures. But the production skills are secondary to the more primary skills of analysis, evaluation, grouping, introduction, deduction, synthesis, and abstracting (Potter 2004). According to Nygren & Zuiderveld (2011) journalists deal with the entire process of making news, from getting the materials, the production, editing and transmission. This way of doing journalist is also present in Romanian televisions and it differs according to the type of television. For example, for a big television with great resources and high national and international coverage the employees have a greater openness on doing more than one task. Also, the financial part has an important position: Mihai, editor & producer „supports this ideas arguing that „The ones that have more skills or are willing to learn more are better paid”. On the other way there are journalists who think the quality of the product decreases once with the

process of multiskilling (e.g. „doing it all”) and most importantly they don’t have much time to make properly the research of the subject.

It is not surprising that there is a discrepancy between the expectations generated by the changes and improvements in the broadcasting infrastructure and the errors that occur in the daily work. Some research has noticed that employees talk about an increase of media creativity and power in decision making in terms of daily tasks, subject choices and news generated. At the same time leads to increased productivity of newsroom, better organization and communication. Technological change lead to resizing the editorial even to the disappearance of professional categories as the number of employees is being reduces. The aim is to produce more material but with the same number of employees or even reduced. Usually in small newsrooms employees have a high experience being forced to do a little bit of everything. Moreover, they identify themselves connoisseurs of many areas. Some of their duties include keeping in touch with the audience especially through social networks and YouTube channel, virtual space where pictures, videos and texts are loaded and the audience can let a comment and discuss the news.

Several studies related to media technologies question if journalism can be considered a profession or occupations and what the arguments of these statements are. Unlike other professions such as doctor or lawyer, the journalist hasn’t a clear division between those that have completed a specialized education and those that practice journalists without a theoretical basis. Deuze (2007) believes that there is a diversification of journalism as the journalists are identified as being an average employee who is flexible, has a range of skills and a work portfolio (i.e. work experience in the field). Other arguments are related to the fact that journalists must be able to control their work and to be autonomous in everyday practices. According to Platman (2004) the flexible work of journalists can lead to independence and risks: journalists become more and more responsible for their own welfare, independent and in charge. On the other hand journalists „were forced to survive a workplace saturated with risk (Platman, 2004: 592). Risk in the case of the journalists studied is about not managing to operate adequately with the changed technologies. For the Romanian journalists the theoretical background is not as important as the experience they gain by effectively working in television and learning from the other employees. Only a few have a background in the domain as for the rest, the practice experience and excitement in doing the profession prevails. Romanian journalists especially those that work in the domain of sports have the following characteristics: are passionate about the domain, have stayed in practice for some months in a television, are staying in touch with important persons from the domain they work in. The last characteristic is very important in the domain of sports as a journalist needs to have many connections in order to create the materials (e.g. interviews, reports etc.). Some of the journalists have a large area of relationships, sources and are involved in projects outside the workplace, projects that militate for their rights and for a society with clear and strong values. They are very vocal especially in the media space.

3.1. MULTISKILLING, FLEXIBILITY AND TECHNOLOGY

The focus on this part is on the meaning of multitasking journalism, the process of learning new abilities, periods of training, and division of labor, the everyday work of gathering information, the routine and standardization of some work activities.

Journalists undergo a process of convergence since 2000 in which they have learned new skills, new abilities and ideas of doing things. I’ve been studying the latest changes regarding the multiskilled journalist. One may understand this as occupational reconversion, disqualification and requalification and these changes involve investment from both the journalists in terms of

time and for the companies in terms of economic resources. In some cases, digitalization was delayed due to financial difficulties, assuming the buying of more efficient devices and some extra costs for the training of employees. For the people whom I've studied the profession of journalist supposes flexibility and even if they graduated from a specialized institution the theoretical background doesn't fold on the practical part which means working in television and facing the real problems.

Journalists say that from college they received theoretical knowledge and the skills were obtained from their workplace. Iona, news reporter says that the most important skill for a journalist is to listen, to listen to what is said and what is not said (behind the words) and to identify if one can trust the information or not. She also thinks that many young reporters spend too much time thinking about the next question or pretending to understand the answers: „They aren't able of recognizing contradictions. I can tell they are more stenographers than journalists”. Practically, a small number of journalists have graduated a college in the field of journalism, some of them have finished a specialized course but they confess that it wasn't in their benefit regarding their knowledge, theoretical and practical baggage as the primary goal was to make social relations with people that work in TV stations: “No, the knowledge wasn't essential.. The course was only for making some relations with specialists from the field. It is a chance to get into the system. We were 106 people, if I remember correctly. All of them were wishing to be presenters, reporters, editors, cameramen. But, in the end, I don't think they hired 10 people altogether” (Razvan, A TV). Reporter Cristina thinks the problem is that often journalists aren't thinking critically. They don't have the ability to look at events in a wider context and to make associations in order to have an objective analysis. Still, nobody takes action to this regard.



Reporter in the newsroom and reporter on the field

According to Carla, human resource recruiter & management journalists need to have skills such as critical evaluation, analytical thinking, respect for ethical values, passion for quality and accuracy, willingness to accept and learn from others, and maybe most importantly learning from feedback. Feedback was rarely mentioned in my discussions with media employees as in their opinion it was never done sincerely or for the lead didn't matter. It only begun to matter when one of the televisions studied had problems with the international management and they have asked to receive a background history for every employer and a clear and objective evaluation for each one. This situation led to individual conflicts, hate and low efficiency. The employees were unsatisfied with the adopted technique as each of them had to complete a questionnaire for other colleagues and give points. The social climate was affected and the conflicts and discussions reduced the social cohesion. No one didn't knew what we're doing wrong and felt frustrated as the received scores obtained weren't the ones expected „In

the end, only a few managed to get more than 80 points. If one had more than 80 points then he had to receive a salary bonus. This is the reason why only the lead management's favorites managed to get more than 80 points" (Maria, news reporter K Sport). This situation generated frustration and work inefficiency as the employees felt that their skills and abilities were unappreciated.

Referring in the following section to work skills, Freidson (2001) made a list of ways that journalists can have control over their work. He mentions that: journalists need to have knowledge of the skills needed to practice the profession, which differentiate them from the outsiders; clear professional standards and the ability to differentiate between professionals and non-professionals; have a basic level of education and professional experience; an ideology that supports journalists commitment to produce at a quality level to the detriment of financial gain at any cost. It is interesting that Romanian journalists don't have a standard list of skills needed; the situation depends on each television according to their level of professional implication. Professional and non-professional can be classified by the way journalists adapt to the new modern trends. For instance Silviu, who is a program director thinks that if he has to choose between a modern journalist who has more skills and a traditional journalist he would choose the last one because prefers to train them than vice versa. In an ideally situation he shouldn't have to choose, the journalist should have both traditional and modern skills but the views and opinions are different nowadays.

The ideas are present in interviews, situations and moments attended by journalists. The journalist's skills are learned from colleagues, practice and sometimes from training. Journalists say that flexibility is the key for success if someone is willing to develop a career in this area. The goal is to collaborate with the other colleagues and learn from them to do other things so that when they are facing a difficult situation to know how to handle, in this way, time and money will be saved. There is no need for the journalist to show fear, denial or resistance to change. Instead, they must pursue opportunities that technology offers: „Some notions of programming didn't hurt any journalist; on the contrary it makes him even more wanted on the market" (Raluca, TV reporter). In the case of journalists that work at K Sport training often meant dedicated hours of extra work with no financial compensation in order to get used to the new tools. The courses covered areas such as computer skills, access to incoming digital material, use of digital servers and video montage.

One may think that working in a television is some of the few jobs where the routine process is missing but looking from inside the truth is that there is routine. The everyday work of gathering information and creating the news is often described as a routinized process. However journalists often talk about routine at work. Thus, the process of collecting information and creating news becomes a routine, following the same steps regardless of the chosen theme. The advantage of a routinizing process is that TV companies can predict more easily their outcome. „Routine is good for the final product seen on channel but not as good for your psyche" (Giovanni, TV producer). Even if they hardly observe it and talk about it, journalists are going to a routine as Ornebirg (2008) argues that journalism can be analyzed as a continuous negotiation between the two sides of professionalism: between the requirements of the organization, implying standards, routine and goals for the company's television and between values, norms and identity of journalists.

The new technology has done some changes such as: increase the journalists creativity, making power in terms of daily tasks, being able to choose the topics and news; change the dimension of the newsroom, for example, the newsroom gets smaller due to the flexibility of technology; the disappearance of deadlines because they need to produce news now, fast as possible as „the deadline" becomes „now" which leads to a major financial benefit as the

production takes place at a lower cost. Also it has led to a change of the dimensions of the newsroom, but also the disappearance of certain professional categories, the number of employees being diminished. For example the profession of archive assistant isn't needed anymore because now TV companies operate with an online archive. The aim of the administrators is to produce more material, but with the same number of employees or even reduced: "This means eventually, progress. Indeed, it's not easy. I think we have to be open-minded" (Clara, news reporter). In one of the televisions the number of cameramen has been reduced because they have a camera on rails that is ordered by a remote control so you don't need the cameramen to do the actual work. This technology is especially used in the virtual studio. This type of camera make the transmissions more dynamic with the possibility of combining the fixed frame images taken in various spots, including outside the enclosure, depending on the desire of the operator.

Analyzing the way society reports to the profession of journalist, Freidson (2001) argues that the division of labor has become increasingly uncertain, reason why the profession of journalist becomes mixed. They are professional categories that are associated with the profession of journalism such as bloggers. The multimedia editorial news has been adopted mainly by television companies that had the economic resources to do this change. Many of the Romanian journalists are bloggers and they are writing about their hobbies such as cooking, travel, meeting popular people, fashion or just about their daily life. The contrary is also available. There are bloggers that consider themselves journalists just because they are addressing to a large audience and are visible in the online space. This is a professional problem that needs to be discussed and create new standards and norms that can define these two categories and tell clearly the description of this job. Beside blogger there are cases in which the journalist has also other functions and one of them may be as a supplier. This is the case of A TV where sometimes the employees needed to make the grocery shopping or to bring the guests to the show and after to take them home.

As Razvan, program director, explained to me:

Theoretically we had a job description but it wasn't legally signed. It was informal. We tried as much as possible to keep up with the job description. I got myself as program director more than one responsibilities. I was the driver, the supplier, the one that bought the toilet paper and in the evening I was the presenter, acting like a superstar... I have to argue very often with the heads of the TV Company because I wanted that the job description of every profession to be respected as much as possible.

Journalists stated that they are focused on their job 24/24, 7/7 because they always have to be in alert if something important happens. They are using applications such as WhatsApp, Facebook messenger, sometimes Instagram messenger. At the beginnings there was no smartphones or Internet access so journalists had to go on the field many times and remember the picture of an informant that supposed to meet with. Often, they looked at a certain picture in the newspaper and when they went to meet the informant there was a change as the man didn't look as the one in the picture. Now, journalists quickly pull the phone and Google it.

Remaining still in the area of social applications, in one of the televisions, the training process took place in an unconventional form by using Skype (to communicated with the specialists) in order to learn to use the new technologies and operate properly with them. This caused resistance because there was a lack of communication and understanding. The situation was solved with the help of employees that knew to operate with the lasted technology and helped the others solve the problems and answer their questions. Even so, the transformation isn't completed yet and as Eduard, news reporter told me "This isn't a thing that you can learn in some days or weeks. I'm still learning every day." This means that being a journalist is about

being opened daily to information and keeping in touch with the latest news even if one has the day off.

Depending on existing resources TV companies need from time to time to invest in changing the technology as the continuously evolution of technology and competition demands it. There is a period of training for the employees as they need to familiarize with the changes. For one of the television which I've studied the training period lasted three months and has generated discussions and dissatisfactions among the media employees, claiming that they didn't received enough information and that they had to spend more hours at work without being compensated in any way. However, there were journalists who have reported that the training period was a positive thing, being considerate as a way of evolving and learning new skills that can help increase their safety at workplace: "All in all this means progress. Indeed is not easy when you have to change the practices and deal with new technology and new ways of doing things but I think we need to be open-minded" (Clara, news reporter).

The concept of "collective identity" used by Julien E. Orr in the paper "Talking about Machines: An ethnography of Modern Job" describes well the relations that I observed during my research in the newsrooms. The employees are trained to deal with errors, even to try to repair them consulting the technical manuals or using Skype to interact with specialists, in order to solve more efficiently the problems. This is in a way similar to what Orr describes to be the world of technicians who repair photocopies. The concept is linked to modern industrial work: "Occupational communities represent bounded work cultures populated by people who share similar identities and values that transcend specific organizational settings" (Julien Orr, 1996: 92). The collective identity in the case of journalists is created by the social relations between them, conflicts, accepted practices, interactions, relation between journalists and technologies.

The multimedia newsroom was adopted very rapid especially in small organizations because they had financial resources. Many broadcast journalists welcomed with optimism and hope the introduction of new technologies. This way of dealing and acceptance of change differs depending on financial situation that every TV Company has. In the opinion of some journalists technology is only problematic only for those that are technophobes and have a fear of embarrassment. The enthusiastic journalists are those that think change is an opportunity that can benefit their careers in a shorter time. Some of the benefits are related to the opportunities to simplify their jobs and learn new things that can offer them the chance to advance in the existing hierarchies and job divisions. For most journalists' entrants the new and competitive technology made their jobs more productive since they have the resources to do the work in a shorter time. But change is not presented only related to technology, but also related to the way news are made and perceived by the audience. The battle is between the numbers of watchers and the difference is made by the idea of interpreting news and by the order presented in the journal: „People look for original and inspiring things and are very interested to cover everything. Actually the journal looks just like a cake. Three quarters of cake are covered with information strictly from sport. The other quarter of the cake has to offer something to people that are not interested in sport. That's how you are going from 22 to 31 shares. And there the money stands" (Giovanni, news producer). The journal is constructed of what journalists call „caps". Caps that are glued to news are the ones that best sell. As Marian told me „when one say that the journal was viewed by 1.400. 000 people then is normal that you sell better than the others that have an audience of 1.000.000 people".

In these times governed by technological change journalists need to adapt and sometimes do the work of video editing specialists or even camera operators. The new requirements have encountered resistance from some journalists, a fact due to lack of training in the use of new technologies and tools. One interesting difference is between small companies

and big companies. According to the resources available at this moment some companies do not have a good financial situation, reason why the processes of re-skilling and de-skilling are seen as an optimal solution. The new requirements have encountered resistance from some journalists, a fact due to a lack of training in the use of new technologies and tools. Older journalists tend to be more resistant than younger journalists saying that professional, economic and social factors conducted to the adoption of new journalism practices. Journalists say that the new practices aren't a thing you can learn in three weeks as they are still learning now, is a process that never ends. In general, journalists who had some college experience with multimedia were more open to the concept and had better attitudes than those who became professionals before learning convergent skills.

Multiskilling is necessary especially for small newsrooms with limited resources if they want to compete in times of hard economic pressure. There is a relationship between the reduction in size of a newsroom and multiskilling. This means multiskilling is not primarily a way to downsize the newsroom, but an industry norm of organizing workers in newsroom of today. As I have mentioned before multiskilling can be defined as re-skilling, de-skilling or up-skilling. Multiskilling is adopted in small TV companies because they don't have a sufficient number of employees and they have to handle the tasks of others. When they employees aren't well trained, then an increased number of tasks may lead to some errors and problems of fulfillment.

The process of reskilling refers to both the professional retraining and improvement of professional training. The training done by Skype made a change in journalist's attitude as now they are more flexible and open-minded. By using Skype program journalists were trained by a specialist from Poland to use the new technology. Eventually the trainer came to Bucharest for a two weeks training with the aim of interacting face to face with the employees who had the opportunity to ask questions and figure out how to operate with the technology. They needed the training in order to make the transition to becoming multimedia journalists. No one wants to look bad and sound bad so the majority of journalists are grateful for the training, but some are being unhappy because they are being asked to do more without being compensated for it. In another TV company with which I had contact the situation looked typically the same: they bought a new technology and they offered training for the employees „We had a week of training. The trainer (which came from Germany) passed by every department an hour per day and explained how the technology works. People were very interested in the idea of good equipment and large studios” (Geani, TV producer).

Employees speak of an increase in creativity and decision - making power in terms of daily tasks, choosing the topics and news. At the same time, leads to increasing productivity from coworkers and to a better organization and communication. The new employees need attitude, skills and training. Some of the younger journalists have convergent skills obtained in journalism schools. Journalists who say that they feel like a multi-reporter also say that they have a greater degree of freedom in their work. They also wanted more feedback and would largely welcome more constructive criticism to help them continue to make the transition from print to multimedia journalists.

Deskilling is another process observed and refers to removing the amount of skill that someone needs to do a particular job; to mechanize or computerize a job or process; the journalists say that everybody in the field is going to have to do video soon, and that is a good thing for their job security. On the other way, up-skilling can be defined as the process of learning new skills or of teaching workers new skills. As an example the modern journalist does the research, writes the scripts, finds the pictures, cuts the pictures for the headlines, uses the summaries, finds the guests, interviews the guests and the list can go on.

Some advantages of multiskilling are related to the level of autonomy obtained by journalists, increased efficiency and production in the newsroom, low production costs. On the other hand, the quality of the final product can be affected. Some employees, especially those that have a coordinating function don't agree with the idea of multiskilling arguing that an employee can't manage all the tasks or can't take out the best of them. Razvan, program director thinks that journalist's shouldn't have to do all the tasks:

I have a very bad opinion about the type of employee that is doing it all. I feel that somebody should do only a single task and to do it properly. Unfortunately I see more and more companies that are adopting the multiskilling process and it seems to me that we are returning to the communism period. I 'am surprised that this model is adopted in developed countries.

4. CONCLUSIONS

Summing up, like most innovations, new technologies in the newsroom are welcomed with initial resistance and cautious skepticism but as change is inevitable they tried to deal with it by adopting new skills and ways of doing things willing to be aligned with the latest standards. Journalists are relying heavily on social media in order to monitor the events that happen daily and are transmitting the information faster as a demand of the changes in order to keeps them in touch with the audience. The media employees who I've studied developed in time skills such as: autonomy, efficiency, multiskilling, lack of time, communicating more with colleagues, no boundaries between professional and personal time, competition, technological dependence, dealing with technological errors, and all in all, maybe the most important fact is that journalists had to understand the change and the goal behind them.

In order to adapt to the transformations journalists needed to cultivate their skills which leded to multiskilling that also included re-skilling, de-skilling or up-skilling. These processes had given journalists more room for autonomy, increased the efficiency and production in the newsroom but conducted to a major negative: not dedicating too much time to the content and being superficial in treating a subject.

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