Comunicação e Sociedade, vol. 28, 2015, pp. 401 – 420
doi: http://dx.doi.org/10.17231/comsoc.28(2015).2288

Between double absence and transnational professional – the unrevealed side of scientific mobility

Izabela Wagner

Abstract

The paper concerns the situation of the majority of mobile scientists working in the international prestigious research laboratories in 21st century. I point out the lag between official communication about open access and democratic and fair selections which occur in scientific careers all the time and unspoken issues related with ethnical and national discrimination in the workplaces. The problem of ethnical discrimination is omitted in the sociological literature issue however, the ethnographic data provided from scientific laboratories indicates that the ethnicity and origin (as well as the nationality of scientist) play an important role. I employ in this paper the Abdelmalek Sayad's concept of "double absence", showing that the situation of "foreigner" scientists (majority of the PhD students and post-docs working abroad) is similar to other categories of migrants.

Keywords

Scientific careers; discriminations; ethnicity and career path; internationalization

Introduction: micro view on scientific careers

Micro approach (fieldnotes):

Boston - "Mecca" for life-science researchers; 2011; during the event organized by post-doc association "Careers in Research"; in the huge hotel conference room over thousands of researchers working in MA (USA) institutions are listening. A key speaker, an American specialist of "career building in science area" starts his show. The topic is: *what after your post-doc*? The slogan – networking, networking, networking!

There, the public is listening how to build their careers after their years spent as a post-doc in the best world research institute. Surprisingly, they learn, that doing a PhD means being smart and not only to learn to be a specialist but also, and foremost for our key speaker, to be amazingly trained in soft skills. To know not only about heat shock protein protects p53, but also how to work and think creatively and independently, how to organize the experiences, how to apply for grants, how to write about results and finally how to present in the conference the findings. Our key speaker pretends that all those soft skills are a kind of capital much more important than a specific knowledge, which that thousands of people earned during years spent at their universities. They should already think what they will do after their post-doc, what kind of job they could take or better – create – in order to have an employment with decent salary.

For the speaker, each scientist should mobilize his or her capital in order to find the job: using "the connections from your university, a roommate, a basketball team member, a person who attended with you the course of the arts or you played in the football in the high-school. Each connection is important and your university, your *alma matter* is an important capital you should employ when you are looking for your job." I listened to the speaker and I remembered Bourdieu's writing about *The State Nobility* (1996) where he is showing how this mechanism of the accumulation of social capital earned in the Grandes Ecoles in France is working. Then immediately the study by Grannoveter (1973) and another work by Newmann (1999) conducted in other social settings and other geographic areas proved the impact of weak ties... that is, how family connections and friends help in job research. And now... I am looking around me.

We are here in this huge conference hall of the nice hotel listening to this guy. Among us, no more than 10% are Americans, the huge majority of persons without permanent permission of stay in the US, only a few who are lucky enough to have Green Card – the important majority hold J1 or H1 visa.

Networking, networking, networking. How to mobilize our high-school friends from Delhi, football team members from Milano, and roommates from Chengdu or art lessons friends from Saint Petersburg? How to get the support of our university teachers when you are from Porto, Warsaw or Poitiers? Are we able – the majority of us – to get a "real" permanent job in the US thanks to our social capital? Or perhaps, as all of us hope - once back in our country we will become true Transnational Professional and we will pursue our research in our home country in similar ways and similar work conditions... What kind of future is there for the majority of scientists working frenzy, 7/7 and without holidays during the years of their post-docs spent in the best place in the world for life-sciences?

On our doors in the lab someone put a sticker: "Eat-Sleep-Postdoc". On the screen of research institutions someone put the article from Nature: "almost 80% of papers published in Nature have authors coming from this town!" You are really in the very heart of the basic research in life-science disciplines (mostly medical fields). All of us – foreigners – are usually the former best high-school students, the best university graduated and we are fare from our families and homes – there our parents are proud to have a gifted kids devoted to science and research.

During years we have heard the advice: learn hard, be good and you will be successful in science. We worked hard and we are still working. We moved from our countries and we aspire to be in the way to get the good place in research laboratory, not to be eternal foreigner post-doc, with the salary which makes us "working poor" in the US. Highly qualified and hardworking, we are the population of foreigners who are pushing science ahead, as they will say afterwards, the American science, and we are in this job market without almost any possibility to get a "real" job. Cheap workforce – educated and attracted by the excellent working conditions and the possibility to get a unique experience thanks to collaboration with the team composed from the best specialists in the world... But this dream work conditions have their expiration date – the time of a post-doc contract.

This paper will focus on the situation of people working as post-docs in life-science laboratories who hope to pursue careers in their field – doing basic research. For them, the mobility (geographic) and their flexibility is understood not only as a strategy to improve their skills and enlarge their knowledge, but also as the only way to achieve the so-called upward professional mobility – which means promotion and access to permanent positions in institutions of research. Their model of career is built around mobility, presented as a prestigious career path which conducts to the top of the world elite circles in their domain.

Being in the best place in the world, they progressively learn about saturated labor market in scientific institutions, nationally oriented support and ethnical (national) preferences and other important barriers which will have impact on their professional trajectory.

Contexts and concepts of the studies devoted to scientists: in between history and politics (mezzo and macro)

The studies of the occupation of scientists has a long history in the field of sociology. The essay from 1940 by Znaniecki (the co-author, with Thomas, of the first field study based on personal documents and biographies: "The Polish Paisans in Europe and America", 1918-20) was the first sociological text focusing on the "social role of a scientist".

The most fecund for the study on scientific careers scientific center was University of Columbia where Robert Merton built a strong research group which conducted several studies devoted to scientists. Scientists' career trajectories were scrutinized under different aspects: age of the first discovery (Cole, 1979), the age of the biggest discovery, the religion, the influence of the background university, calendar of career, values attached to the scientific work, the prestigious careers – Nobel prize winners (Zukerman, 1977), construction of the reputation (Merton, 1968). Those studies were conducted mainly from 1960s to 1990s. Other authors with different theoretical background (mostly constructivists – Latour and Woolgar, 1979, Knorr-Cetina, 1999, 1981, but also interactionists) by consequence focused on subjective side of careers. Glaser elaborated concept of comparative failure (1964) and Hermanowicz, 30 years later (1998), showed how this phenomenon still works in the case of physics researchers in the US. The important current of reflection was developed in the domain of gender studies and is devoted to women in science and at the university (Doer-Smith, 2004, Fox, 1995, 2001, 2005, Reskin, 1978). Another substantial category of studies focuses on geographic mobility (Bento, Cotta, Araujo, 2009, Mahroum, 2000).

Last current time coined the concept of brain drain which since late 1950s is present in the studies on scientist trajectories (Giannoccolo, 2004). As I have already devoted a paper to criticisms of the term (Wagner, 2013) I will only mention the success of this concept and its longevity.

Over 50 years of permanent use of the term which was created to describe a particular phenomenon that has been occurring since 1950s, affecting mostly British

laboratories that moved to North America. The massive emigration of scientists, mainly to the US, provoked an important feeling of loss in Europe. This phenomenon – called brain drain – has also turned out to be precisely the basis of the fast and impressive success of American science (the first important wave of emigration however occurred because of Nazi regime first in Germany and after progressively in whole Europe from 1930s to 1945). Cold war (rocket race) and proliferation of life-science research sector constituted two processes which took place since 1950s in the US. In America, several new institutions were created and it was a unique dynamic in the creation of the work places for scientists (Pestre & Dahan, 2004).

This increase of job offer was exceptional. At that time (in 1970s and in 1980s) scientists who today are at the end or at the last stage of their career trajectory, entered on the job-market. In other words – the careers model presented in the studies and transmitted in the research world are reflecting the experiences of people whose professional path occurred in the exceptional dynamic of new institutions, and huge job offers. This was the time of exceptional prosperity. The researchers had no problems to get a good job and to take a permanent position. This career path was not only reserved to the US citizens: foreign scientists also had very few problems to obtain permanent positions. For European scientists, especially coming from countries which after WWII experienced huge difficulties to (re)create decent conditions for scientific research of an international level, the elite career path was almost univocally as such: theoretical education in their country of origin, then practical training in western Europe or US, finally – a job position in the US.

The job context in the research fields changed radically in the last decades of 20th century not only because of the collapse of the Soviet Union, but also due to modification of the university environment. So called "democratization" of the university education, which means more laureates of PhD diploma, as well as globalization/internationalization or rather imposition of the American culture which has dominated research fields (for example, the famous rule of *publish or perish* – but publish in English, in mostly American scientific journals), the macdonaldisation of university, commodification of higher education combined with all neoliberal changes – all those features together provided grounds for deterioration of working conditions in the research settings.

The globalization and political changes (free circulation of highly educated researchers from Soviet Union, former Eastern European Countries and China) completed traditional emigration waves of young researchers from India, Pakistan, Western Europe, Korea and Japan. In the space of two decades, the market of permanent positions in the US (both within the university world and institutions of research – public or private) become saturated. The model of successful career built several years ago is no more available, but this is a common taboo subject in the milieu of scientists. Those who play the game of rat race and believe that success depends on hard work and huge intellectual potential do not speak about job market. To maintain the ideology according to which the best win and the selection of researchers is fair and rests on the meritocratic professional criteria, they pretend that such auxiliary characteristics as country of origin, religion, class and university play no role while one competes for a job.

However, only in the last years, some voices started saying that precarious job is increasing very fast in the universe of research and academia around the world. Presently (for around 10 years), we are witnessing the mobilization of the international community of the researchers who struggle to improve their work conditions. In this complex and international context, first publications by experts of scientific careers focused on topics related to the migratory phenomena and specific situations of foreigner scientists – discriminations and hidden practices which determined their daily work and job perspectives. In such context we observe tensions between two opposite models of international scientific careers: the first one I call 'the Transnational Professional ideal' and the second one, 'a Double Absence model' – using a term coined by Franco-Algerian sociologist, the specialist of the migration, Abdelmalek Sayad (1999).

Ethnographic studies and their concepts: transnational professional, transmobility and double absence (from micro to mezzo)

This paper is based on an ethnographical study conducted in several life-science laboratories situated in four countries (France, Poland, USA and Germany).

Specificity of the ethnographical method rests in lack of the theoretical approach a priori (before the start of the data collection process); it requires elaborating of the working concepts during the period of observation as well as gradual choosing of the research problems to focus on. In this section, I will present the development of my analysis in relation to particular places where I conducted my investigations. This is why only this part of article I will present definitions and concepts created during the period of data collection.

I started my study, in 2003, in France (basic research institution and a team which was in-habitual for that particular place, as it was called by all researchers in the building "international": in 15 team members only three were French nationals). Since this first experience of observation of work in the life-science laboratory, it has been obvious to me that the aspect of "international culture of work" or "relations at work determined by culture or origin", in other words the culture in the sense of ethnicity of researchers, were important[1] was absolutely important. According to my knowledge, there was no sociological literature focusing on this particular subject: no mentions of conflicts, misunderstandings or problems related to the crucial aspect of mixed culture. How is it possible that different languages of team members, various styles of organization, divergent ordinary practices and no homogeneous approaches would not become sources of some particular situations and problems? The field data suggested that it was one of the most important issues in daily lives of the people working in this place (Wagner, 2011).

1 This is a well-known approach in Poland, first introduced by Ludwik Fleck who gained international acclaim thanks to Edinburg School and after the publication of Kuhn's Scientific Revolutions (1962). In 1935, Fleck - famous microbiologist, physician and sociologist and philosopher of science published a book that got translated 44 years later in English under title: *The Genesis and Development of a Scientific Fact*, (edited by T. J. Trenn and R.K. Merton, foreword by Thomas Kuhn) Chicago: University of Chicago Press, 1979. In his work Fleck focused on collective thoughts but also he showed how important in the production of scientific knowledge is the role played by scientist him- or herself and his/her culture.

I started comparing the situations observed in my field with analyses of specialists in the intercultural management studies only to find several interesting points, but nothing really suitable for research in my environment. Typical intercultural settings presented in sociological literature comprise management coming from the central countries and workers form peripheral areas, in the Wallerstein typology (Wallernstein, 1974). The national originals correlated with social class and usually the researchers analyzed bi-national or bi-cultural settings. The relations of post-colonial type and power/domination patterns were easily perceptible while reflecting on international division of work and global power structure. In case of research laboratory though, the situation is much more complex as teams are much more mixed. However, as I will show later, the relations of power correlated with national (ethnic) origin of researchers are also present in the research world.

To illustrate a typical composition of a research laboratory, my team was not characteristic for French research environment but it was typical for an international institution of research in STEM (which may vary depending on specialty; in medical research, in the US[2]). In my field – on 14 observed persons, 3 researchers were French, two were from Argentina, one American-Korean, two persons from Spain, two from Germany, one person was from Sweden, one from Israel and one from Greece. The PI (lab-leader) was British. After this first immersion, in a French institution but also within a truly international work team, I realized what tensions exist between a model of internationalized career and local professional trajectories. That issue could be illustrated by the excerpt of the informal interview with PI (British, educated also in the US and Japan, working in French institution):

> John is furious: I cannot believe! You know my former PhD student Francois. He was really good for research, did amazing job and I helped him to get his post-doc at Harvard. After a month of his contract, he received the information that he get the position of associate professor in P. (small university in France) and decided to come back interrupting his contract. I am shocked – he was in the best place in the world for his research and he dropped everything for this teaching position. I know this is a status of state employee and you have job to the end of your life but his research! I cannot understand this.

This example shows the choice (which in itself is today an exceptional situation as permanent positions in research field are rare) between: 1) precarious situation which prestigious institutions offer for some years under post-doc contract during which the rat race should provide successful career in research and 2) the stability of teaching job with worse conditions for doing research. It is a choice between an international career

[2] When I presented my results to the students of STS course at Harvard in 2010, one student asked me if I was in the lab of his father (Chinese) - as it was exactly the situation of his team. Obviously, I described another team. It is essential to know that some specialities are overrepresented by the researchers from one country - for example in bio-informatics, there is a lot of researchers from Russia, the crystallographers are frequently educated in Poland (long tradition).

and national professional trajectory. The excellence in research fields seems to be accessible rather on the first path. Those two models of career are also discernible in other professional fields, such as in classical music (Wagner, 2015) or the middle and higher education (Anne-Catherine Wagner). In France people realize their career according to French model and thanks to French institutions or following the international pathway (and usually in research going to British and US's institutions).

This sharp distinction between local and international career was also present in my second fieldwork which I started in 2006 in Poland. The poor financial support by the state contrasted with the high level of higher education (usually theoretical knowledge was excellent and only in some areas also practical).

For well-educated graduated person becoming scientist obligatory includes the experience abroad. In the case of Poles today it is impossible to get a position (not permanent while nowadays this type of contract is not possible to obtain due to the lasts reforms of HE and Science sector) without post-doc abroad. Four years of fieldwork will not be complete without interviews with researchers from other than STEM specialties and by short term observations conducted in German and US laboratories. Analyzing this portion of data, I have coined the term of Transnational Professional which reflects on the importance of international experience in the career of scientists. In the case of Polish researchers this is no more the case of elite members as it was in the past (I did also the historical comparison of careers built since WW2) but an ordinary trajectory in research area (with the exception of some humanities specialists whose work is grounded in Polish culture and language).

According to my results, Transnational Professional is a person who is a professional (Reader, 1967) and was socialized in several countries; their career path includes multiples experiences of geographic mobility. This person is the member of the international networks and has the affiliations with different institutions in different countries; TP is working with funding's provided from various sources (national and international) and behaves according to the International Culture of Work[3] (Wagner, 2011). The first part of the concept – adjective Transnational – requires some explanation. While 'international' is perceived mostly in Durkheimian way, where the word refers to aspects of cosmopolitan culture, in the scientific settings we observe a different version of metissage – closer to the Maussian interpretation which is inter-national. In order to avoid the misunderstandings, I decided to employ the term transnational. This expression appeared in sociology in the study of (im)migration "referring to the civic-political memberships, economic involvements, social networks, and cultural identities of (im)migrants and their offspring extending across state-national boundaries and linking people and institutions in two or more nation-states in diverse, multilayered patterns" (Morawska, 2009). This term allows better understanding of phenomenon, in which exists multiple dynamics: tensions between national and international, between homogeneity of single

[3] I will not develop here the term international culture of work because the term is not precise and requires long descriptive analysis. Shortly speaking, this is a type of professional culture which is not inscribed in a repertoire and is the subject of direct transmission by immersion and requires tolerance and flexibility in ordinary communication, more open attitude toward people originating from other countries and not being English native speakers. (Wagner, 2011)

dominant culture and heterogeneity of multiple cultures due to the internationalization and the presence of the phenomenon we could in certain situations call Americanization (for more information see: Wagner 2014). Something is missing for clarity.

The vision I obtained thanks to my Polish basis in ethnography was compatible with the discourse of EU politics of research which before the 2013 emphasized the necessity of mobility of scientists. The ideology of politicians in the charge of research strategies and the conviction about the power of geographic mobility was so strong that in the publications of European sociologists as well as in the discussions between European researchers the term mobility lost his adjective – geographic and signified only this form of mobility, which was different in the US where mobility is mostly related to social (or professional) upward mobility (vertical ascension), and not to horizontal (geographic). This crucial role of the horizontal/geographical mobility was so important that I have come up with the term of transmobility to define the interactional process between geographical mobility and career advancement. Transmobility is a social process which occurs in the professional internationalized fields (artists, scientists) and which is composed from different stages. I defined 4 stages according to the form of the mobility and the level of the reputation (early, basic, expert, late mobility)[4]. The concept of transmobility – appears to be well adapted in order to show the processual character and complexity of studied phenomenon, which is not limited to a study of dislocation from one place to another, but shows the mobility as a phenomenon which is simultaneously: a) built as a continuity of a relationship, b) a generator of information and knowledge; c) the source of other resources; d) which contains the ensemble of techniques, behaviors or this "international professional culture". In other words, transmobility is both:

1- A process in the which the persons participate in acquiring knowledge and skills; this process makes possible the participation in the activity of their professional universe at an international level (the internalization is for life-science an ordinary situation),

2- A context - the world of life-science - which is the consequence of the technological progress.

The next step in my study of the International Culture was carried out in the "Mecca of life-science research" in some best Bostonian institutions for basic research. There I was able to observe people at work, and I was immersed in the mythical phenomenon of "post-doc" in the US. In addition to my perspective which was typical for a Polish and a French scientist working in the US laboratory, I could learn to understand Asian and other European-origin researchers' situations. And my doubts about the International Culture, in which the professional determinants rivaled the auxiliary characteristics of researchers, were nourished by daily situations and numerous accounts from foreign researchers who experienced treatments which they themselves evaluated as discriminatory.

In the "Mecca of life-science research", our lab consisted of one Swedish post-doc, two Germans, one French, one Polish, one from Thailand, one PhD students from China,

[4] It is important to mention here that this model is reflecting an ideal type - the limit of age for example are adapted by European institutions requirement and categorizations; in fact this is a |"masculine" version of scientific career, in which the years spent on parenting are not taken into account. This is one of the important and not always recognized factor of gender inequality.

one Chinese senior researcher, one Chinese post-doc, two American technicians, one Polish technician. One American-Korean post-doc and one Japanese post-doc[5]. The boss was Polish-American. It this place 9 languages could be used, however the English was imposed and only in some situations I noticed discussions in Chinese and Polish.

In order to get more data, I have also spent a lot of time in the post-doc space where people from whole Institute came for coffee breaks and to rest. During this fieldwork I was able to observe people at work, and I was immersed in the mythical phenomenon of "post-doc" in the US. In addition to my perspective which was typical for a Polish and a French scientist working in the US laboratory, I could learn to understand Asian and other European-origin researchers' situations. And my doubts about the International Culture, in which the professional determinants rivaled the *auxiliary characteristics* of researchers; my participants researchers in the informal interviews told me that they experienced treatments which they themselves evaluated as discriminatory.

The term 'auxiliary characteristic', as a tool for investigating careers of people, was introduced in sociology by Everett Hughes. In his 1945 article "Dilemmas and Contradictions of Status", Hughes showed how non-professional characteristics, unrelated to hard and soft skills (he used the example of Afroamerican physician), such as race or color of the skin, may determine perception of a given professional by his client and by consequence, may play an important role in one's professional trajectory. In my American fieldwork, I have had several possibilities to collect the data related to this phenomenon; one of the first results of my work was my paper about what the insiders called "ghetto laboratories". In this article I have analyzed effects of the internationalization of scientific teams and provided a list of obstacles in the career building which foreign researchers commonly face.

The first category of the obstacles is related to language. The language spoken in the life-science laboratory in the internationalized work places could be called "scientific Pidgin English". This is not really the English as it is spoken whenever native English speaking people communicate.

One of the participants told me the following story:

> My Australian mate came home after 2 years of work in France. After some hours spent with his parents, the family asked him to speak English and to employ more than 200 words. Indeed, his skills in mother tongue became very modest, as in his European work place foreign scientists are using very simple forms and try to communicate in a direct way, going without elaborated language.

Even if this scientific Pidgin English is not really complicated for foreign scientists (except perhaps British, Australians, Irish and other persons originating from regions in which English is the first spoken language) they still have different accents and influences of their mother tongue and a lot of them have difficulties to be understood.

[5] When I presented my results to the students of STS course at Harvard at the end of my fieldwork, one student asked me if I was in the lab of his father (Chinese) — as it was exactly the situation of his team. Obviously, I described another team. It is essential to know that some specialities are overrepresented by the researchers from one country - for example in bio-informatics, there is a lot of researchers from Russia, the crystallographers are frequently educated in Poland (long tradition).

I was able to collect opinions about refusal of scientists of some origin (Chinese, Japanese and sometimes, Indian) out of fear that they will not be able to maintain clear communication which is the basis for successful collaboration in science and ensures good functioning of the laboratory team. To be as precise as possible in order to explain what should be done or what a given person is doing, when the subject is the unknown scientific space (in basic research this is a current situation), is very important for all people working in the project. It is very difficult to ensure through correspondence if a candidate for a post-doc position is able to express clearly, in English, her or his ideas. During the selection process this ability counts among the most important features. By consequence, the notion of auxiliary characteristic corresponds well to a situation in which an excellent Chinese scholar would not be accepted for his or her post-doc due to lack of clarity in the pronunciation. A native English speaker will have no such eliminatory condition.

However, not only one's accent guarantees successful communication. The cultural meanings and understanding are also very important (Wierzbicka, 1994). Legendary in the laboratories are stories about cultures in which people are not able to say 'NO'. For those from European cultures refusing is easy (some education systems even reward students' critical approach) whereas in other cultures refusing or denying is perceived as an expression of disrespect and such customary pattern is nearly impossible to transgress by a lot of people.

The following story describes this situation:

> I was aware that in Japan they are not saying no. I read it before I came to Kyoto, and during the first week when I read their book about Japanese culture. But in the lab, I did not pay enough attention to it. When I asked the colleague who worked with me on the project - you understood? He said OK - and only after 2 months of work I realized that he did wrong experiences and all his mistakes were due to lack of understanding. It was not possible to him to say - 'no - you should repeat' or 'I did not understand'. Polish scientist after his PhD study in Japan.

I collected a large number of similar stories. It is interesting what the power of our original culture is and how we lack openness or non-ethnocentric attitudes – we are reared in a culture in which communication patterns include no-expression and this is hard for us to keep in mind that other persons can be educated in a different way.

Another auxiliary characteristics which frequently amounts to a subject of discrimination and makes scientific career more difficult is gender-related. When intersecting two discriminatory characteristics (ethnic origin and gender) we see a really difficult situation for a scientist who is trying to build her career based 'simply' on professional skills and knowledge.

A 40-years old female scientists from North America:

> You know, this is crazy, the power of your education. When I am in the US, I never had the troubles to discuss science with people, to develop argumentation, to quarrel and to be opposed. When I am in my country, in Japan,

> this is something in me which is changing. I become like a little girl and in front of those old professors or even those who are in my age, I am not able to say - no! You are wrong! Even if I have strong proves and I am convinced that they are not right - you know this is the power of my first education. You have lower status and you are women!

In some situations, gender as auxiliary characteristic determining career could be discriminatory also for men:

A 50 years old female PI told me:

> I had very bad experience with this collaboration with a guy from Eastern Asia. He was always saying in a very strict manner that he understood, and he was right, etc., that he was not able to accept the critics and to recognize his failure. And I am sure that was because I am the woman. So, I was not able to mentoring him and after 2 years of unsuccessful collaboration his contract expired, he didn't have any publications and I was not supportive for the prolongation. And you know what? Since there I am not accepting people from this region because I think that for them having a female boss is unacceptable even if they are smart, their education is made is a such a way that they should be always dominating in the relation to women....

What is important in the excerpt of this interview, this is the conviction of PI that the problem in the communication was due to the culture and gendered education different from occidental. In such light, it is evident that for the interviewee, in the selection process for the post-doc position, cultural origin will play a crucial role. Someone educated in the area in which the equality between genders is typical for occidental world[6] will have trouble to understand other models of gendered relationship.

The above-mentioned aspects are simple to observe and to analyze, which cannot be said about other types of communications which include feelings, conflicts and the dynamics of the relationships constructed over time. A specialist in the field of sociolinguistics, Anna Wierzbicka, demonstrated how our primary education and first years of our life determine our feelings for the rest of our life. The mobile scientists usually spent around 20 years of their life in different cultural environments than US or European metropolis or university campuses. Their cultural scripts (Wierzbicka, 1994) are well incorporated and play role of cultural patterns in different situations. This is especially important from the point of work organization, in conflict situations, which in observed environment are arousing constantly. The laboratory space is a social environment in which several different tensions[7] generate ambiance that favors conflictual situations.

[6] Here obviously I am taking perspective of participants, not gender specialists who are aware about the important differences in the gender education implemented in different EU countries, different states and different social classes and professional areas. But for my participants this is a black/white box-in which exist two categories of gender education - occidental which respects equality and other - (for a lot of participants it is in relation to religion according to which the Islam is a cultural area in which the gender inequality model is highly discriminating for women.

[7] The tensions are due to the several factors, structural (short term contracts, lack of stability, competition for grants, publish or perish expectations of publications and good results, pressure for PhD term, reporting system, long working

People working within the international teams have various models of conflict solving and different perspectives on so-called "loosing one's face". In my understanding, Goffmanian analyses of maintaining relationships as well as interactionist approach which supposes knowledge about significations of our behavior and expressions should be completed by analyses of the cultural aspects – even if we expect some "intercultural model of conflict solution" adapted to the organization of work in the laboratory, the data from observed fields suggest that participants are constantly in the space of an "in-between": oscillating between their original cultural patterns and something what each of them imagine as the "international" or "global" or "professional" models of managing conflicts[8].

In fact, we don't have works about those issues in the literature about management in the laboratories. Specialist of work in such places are focusing on other problems, as though such questions as cultural differences were absent from the scientific world. However this is the social and professional environment similar to other places in which dealing with multicultural presence is connected with the use of stereotypes meant to complete one's lack of knowledge about a given culture or occurrence.

If stereotypes attached to national origin of actors are in use, they also require some adaptation to the scientific work environment. Scientists pretend to be open-minded and tolerant and certainly they are making huge efforts in order to pursue their work in such complex cultural environments. In some places, they use formal guides which they create in order to implement good practices, independently of habits that newcomers may or may not have. One laboratory boss told me that he asks each Asian PhD student to write, manually, the definition of plagiarism. He is spending hours explaining that copying without mentioning the source is a wrong practice and not at all acknowledgment toward the master (as it is the case in Chinese culture). Another person told me that several times, he explained that journals of the board (in which the experiments and all laboratory work are documented) are personal and nobody without asking should look inside. I observed how a young scientist taught her colleague that looking in the computer screen of other person without permission is impolite and constitutes a transgression of privacy rule. This kind of cultural education is taking place constantly in the laboratories.

Such situations provide room for explaining the rules which are obligatory in the occidental world. Then the people involved are supposed to understand and respect them, or to understand and not to respect them, depending on situations and participants. It becomes no more a question of culture of origin, but one of the human nature as violations of rules and transgressions of good practices occur not only in multicultural settings.

In all observed fields I was able to notice closer relationships between participants, which in some cases lead to establishment of an informal hierarchy. People collaborate

hours, lack of balance between private and professional life, missing home and family, being in the foreign country, different language of daily communication, different diet and climate), relational (mentor-student relationship, collaboration dependencies, model of professional relationship. constant learning of the type of relationships in various situation, the feeling of being apart) and personal (the professional environment in which the feeling of comparative failure (Glaser, 1967; Hermanowicz, 1999) is very high.

[8] In my paper devoted to the Ghetto Laboratory I provide several examples of conflicts. While this publication is available on-line I will not provide the same data here.

more with one person than another not only because of the project but because they have 'better understanding'. According to sociology of work, good communication is fundamental for a fruitful collaboration. As I mentioned previously, some obstacles are due to the various origin of the participants; this is why frequently people from similar cultures collaborate more smoothly. I will not develop here on the importance of culture similarities and educational background for scientific knowledge – I pursue this subject in another publication. However, we should notice that this cultural understanding is also important for the core matters of scientific work: not only in the area of soft skills, good relationships and clear communication but for the very heart of scientific problems.

Concluding this section devoted to an analysis of cultural differences' impact on scientific careers, we could understand why people are organizing their work in so-called "ghetto laboratories" – which means choosing collaborators originating from closer cultural areas or simply from the cultural space which is known to the person in charge of selection (for example, after successful experience of collaboration between French PI and Chinese post-docs, the PI will not hesitate to hire another young scientist from China; I met the persons who after such good collaborations became fascinated by this "exotic" culture and started to learn Chinese).

Regardless of the lack of information about those cultural aspects of work in the scientific laboratory, we maintain here that culture is important. Culture is also a crucial auxiliary characteristic and can be a decisive element of the negative selection.

Double absence

Data collected in my American fieldwork provide information about the impact the national origin of scientists can have on their job perspective and career development. Numerous services proposing to foreign scientists help in grant writing or paper corrections indicated huge difference between people educated in English speaking areas and others. But good English writing skills are not the sole element. One of the PI told me:

> You know, I am not able to invest in all people in my lab. There are over 20 people and some of them are here for a short time. I cannot spent hours with them teaching them how to write a grant proposal. This is a huge amount of work. I do this with people who will stay in the US, they are decided to pursue here their career, they have no home-sick or cultural non-adaptation.

Like this American scientist said – the investigation is important in next generation of scientists but not all people in the laboratory will benefit from the same treatment. My previous research showed that in creative occupation in which crucial element of the career is the construction of the reputation among peers and where the type of knowledge is reserved to the highly educated experts, what becomes the most important is the career coupling process (Wagner, 2006). Career coupling signifies very close collaboration between specialists (usually mentor-disciple relationship) during which occurs the interaction between two careers, people in the field recognize that collaboration and each

participant is benefiting for its career by making an important progress. Such investment in a career coupling relation is possible only in limited number of cases as it requires intensive, daily collaboration. This is both an elite and personal type of relationship and not a fast-industrial case of ties. During the first period of such relationship, people seek their match in regard to intensive and fusional collaboration during years. Certainly similar culture and easy communication make the matching period easier. For those who have difficult access to their boss and were not able to develop such privileged relationship the feeling of lack of mentor as well as lack of the opportunity to learn the way chosen scientists are supposed to is overwhelming. Learning of such important skills (paper or grant proposals, CV according to preferable style of a given area, personal statements, motivation letters, getting into the professional network to which the boss is belonging, introduction into the reviewing work, sometimes teaching assistance) is also important as pure scientific knowledge. Without access to those skills and informal resources (formal resources are modest while foreigners are not in their own territory) the next step of the career in this country seems difficult to attaint.

One former scientist who became a career advisor and consultant for young scientist, herself originating from India, told me in an interview that only rarely foreign postdocs will have chances to stay in the US and to get more stabilized than through a postdoc contract job. She maintained that the level of their English as well as the cultural in-adaptation make impossible the success in their selection for an academic position even in a second rate university. They have no knowledge about how to teach American students and how to be a part of faculty. They will be completely lost with college or university bureaucracy and unable to provide money for their research. At the end of that analysis she told me that people from Europe (Occidental) are better prepared than those coming from Asia, however the selection comity will still have trouble choosing them – and with equal skills and achievements, they will chose an American candidate. She stressed that:

> We – US's parents we pay a lot for our kids' education and we should support our kids in the selections. You in Europe you have your education for free – this is not just this competition. You know – by 1 kid we have over 200 000 dollars of mortgage – this is a huge money. The time is hard and we should support each other - you understand?

In the light of this excerpt it is not surprising that foreign scientists perceive their origin as an obstacle. I am not developing the subject of visa and political decisions concerning visa attribution which also have impact on scientific careers (after 9.11 a lot of scientists from Middle East have had troubles to pursue their careers in the US). The foreigners are cheap scientific workers who contribute to the development of American science, yet without perspective for getting a job such as their American colleagues will obtain. I have noticed that for the majority of my interviewees and participants met in the US, the professional future will be difficult. Some are speaking about going back to their country (depends from the country), others about going back to the EU (as is the

majority of Poles who prefer to work in EU but not in Poland). Their visions of the present situation and near future are similar to other emigrants, who express their conviction of being a citizen of second category, not having similar rights as people in the same situation but with better passport.

The expert of migration study, Abdelmalek Sayad, has built a concept of Double Absence (1994). In his book, he described situation of several generations of emigrants who were subjected to the situation of double absence: they are no more in their country of origin, they have lost the important connections and they become tourists visiting their family, and at the same time they have no such rights as the citizens in the country in which they have chosen to live. They have no similar access to professional promotion or to various resources which are accessible to native people at equal professional level. The perspective of the development of their career and improvement of their personal, financial situation are not similar to those of the native population. They do not become members of the local governance institutions, they have no access to important positions.

Foreign scientists working abroad face the same situation. This is no exaggeration at all to employ the concept of double absence in case of emigrant scientists. Moreover, those who are coming back to their country are also in similar category. They have lost their position, especially if their experience of mobility was long-lasting. As it is the case for numerous scientists, after several years of absence (the career path strongly encouraged by EU policy) their return is not easy. In my work devoted to the population of elite Polish scientists who came back after their abroad experiences, the feeling of in-adaptation, of being an outsider and a person not all too welcome by those who stayed in their country and who worked according to "the old style" is largely spread. They are speaking about "the glue": a kind of conjunctions of several difficulties to implement some modifications principally related with the work organization.

Results of my study gave basis to introduction in the area of career studies the term of post-postdoctoral depression. This is a persistent feeling of one's lack of agency and failure which occurs some months after the return of scientists. As they were highly motivated when they found the possibility to go back and to take a position (usually temporary) in their country of origin, they hope for having equal rights and standing with people in place. Frequently this leads to huge disillusion and disappointment as they are not able to pursue their research work at the level and with the dynamism which was characteristic for their previous stage of career (post-doc abroad).

Personal cost

By consequence, the use of the term of Double Absence is justified. The mobility and flexibility of scientists at the period of post-doc is required – all people are invited to move in another country, regardless of elderly parents, their own young family, sometimes with close family members, sometimes alone. The personal cost of this life at distance with the family members is not at all studied. So many divorces, broken couples and abruptly finished relationships... So many crucial life situations missed (the good

ones, like festivities of the end of year and marriages in the family, or difficult ones, like meeting with dying older members of family or helping parents in their daily life). All those sacrifices are not balanced with important salary (like in the case of the international managers) nor by interesting career perspectives. Science is voracious.

This sad side of the experience of being an international scientist is, according to my knowledge, understudied and it rarely constitutes object of written communications. Even if data from the field are rich in information, the scientific community is not sharing about those aspects which shape their lives. Why?

Several studies devoted to mobile scientists do not employ ethnography which is in my opinion the sole method to bring discriminatory practices to light. The focus in the studies on regulations and law implementations is not reflecting reality, as in this case of bi-national scientist. After her PhD in France she moved to Poland and there, 2 years after the regulation of mutual recognition was signed and Bolonian process has been deeply implemented according to documents signed under EU supervision, the young holder of French doctorate was supposed to obtain recognition – which means undergoing the process of qualification in Poland in order to be able to compete for a position of 2-years assistant professor. Such procedure in light of EU regulations was illegal. Several years after, this same person obtained habilitation in Poland. In order to be allowed to present in the competition for full professor position in France she went through the process of qualification. There, again the national practice (illegal but employed) was against EU-regulations of mutual recognition of diploma. The French commission for qualification advised the French-Polish candidate to pass again the habilitation diploma in France. Two situations in two different countries show how the internationalization, in form of Europeisation, is not working and how mobile scientists is in the double absence situation get punished because of his/her international pathway.

Collective lie

The concept of the collective lie of emigrants constitutes another fruit of decades of work conducted by Abdelmalek Sayad in the milieu of North African emigrants living in France. This term refers to a phenomenon of collective maintaining of silence about conditions of work and life of emigrants in France in discussions with those family members who stayed in their country (Sayad, 1999).

This silence and the absence of information about the difficulties and discriminative treatment of emigrants during the familial meetings play an important role in the maintaining of the image of successful person and happy life which emigrants have in their new place. The collective lie prepare the next generation of emigrants for their migratory path. Some cases of real success illustrate only exceptional character of some trajectories.

This situation is similar for scientists. The legends about careers built in the path do not tell the sad side of the situation of emigrated scientists. Some of them are real but, as I mentioned in the introduction, those careers were realized in the past, in a completely

different context of job market where the scientists had the choice about their work place and permanent positions and good, stable positions were not at all exceptional. Collective lie about the situation of precarious scientists (emigrants but also those who try to build their career in their country of origin) is working well for politicians of science who popularized geographic mobility to the point they created the effect which I explained using the term of transmobility, in other words, it has become elevated to a crucial aspect for scientific careers.

Finally, the mobility and numerous "possibilities for getting a job all around the world" gave us – scientists – hope for a better future. The promises of having a chance and possibility of sending CV and proposal around the world attract some scientists, yet only exceptions will be successful in the global court of getting a job game. Those who failed will be convinced that they are guilty themselves for they are not good enough, their CV was not rich enough and their list of publications not long enough as well as the IF or H index not high enough.

In the culture of individualism, the failure is individual not structural and collective lie supports this mechanism of explaining the failure through individual achievements. When sociologists and specialists of career studies in the social world of science and academia will start to work intensively on aspects mentioned above and will contribute to break silence about quality of life and career perspectives of thousands of scientists educated in peripheral countries (in which society is organized for guaranty the free education to best students) and working in developed countries (in which they are underpayed and exploited; Stephen, 2014) perhaps general discussion will contribute to the amelioration of the situations of scientists.

Conclusion: Kleenex researchers...

Scientific work is a collective enterprise and individualization of our society which occurs recently under neoliberal influence well perceived in Academia and Science environment is not going well alongside. Paula Stephen – an American economist – using her discipline tools demonstrated huge state corruption and waste of public resources because of this new liberal type of management. Moreover, she openly speaks about exploitation of cheap workers. I call them Kleenex researchers, as they are spending the best 10 years of their professional life working as a post-doc without further perspectives.

In this paper I pose a question about the situation of researchers working in life-sciences laboratories (to some extent, this analysis concerns also other specialist – researchers). In between, there is a large area of situations which oscillate in the space limited by – from one side (positive) the Transnational Professional, which define a successful scientists conducting her/his career in two (or more) countries and present at the international level, and from the other side the (negative) Double Absent scientist – emigrant or temporary present in another country researcher who is destitute of the similar resources that his/her laboratory colleagues originated form the country of their work have.

Interactionist perspective in career study traditionally includes dynamics of the situation. This is the reason for looking always in a given particular situation, its context and dynamics. One person could experience both situations. The career of scientists is long – usually over 40 years – and mobility practices are various. The context around those careers is also very dynamic and diverse (some disciplines become "hot", other cease to be popular). A professional career in creative fields is always complex and depend on multiple factors and conjunctions of elements. The mobility and auxiliary characteristics in case of trajectories in research world often have crucial impact. This is why we – the sociologists – have important role to play in breaking the collective lie and in the improvement of the work condition of researchers.

This area of human activity should be free from exploitation, north/south domination relationships and center-periphery power relations - as show numerous studies pertaining to the best conditions for creativity, ingenuity and innovation.

References

Bento, S., Cotta, D. & Araújo, E. (2009, 24 de setembro). Mobility and research institutes in Portugal - Conceptualizing knowledge circulation. Second *International Conference on Academic Mobility*. Tallinn.

Bourdieu, P. (1996). *The State nobility: Elite schools in the field of power*. Stanford: Stanford University Press.

Cole, S. (1979). Age and scientific performance. *American Journal of Sociology, 84*(4), 958-977.

Fleck, L. (1979) [1935]. *The genesis and development of a scientific fact*. Chicago: University of Chicago Press.

Fox, M.F.(1995). Women and scientific careers. In S. Jasanoff, G. Markle, J.Peterson & T. Pitch (Eds.), *Handbook of Science and Technology Studies (*pp. 205-223). Newbury Park: Sage.

Fox, M.F.(2001). Women, science, and academia: Graduate education and careers. *Gender & Society, 15*, 654-666.

Fox, M. F. (2005). Gender, family characteristics, and publication productivity among scientists. *Social* Studies of Science, 35,131-150.

Giannoccolo, P. (2004). The brain drain. A survey of the literature. Retrieved From www.dse.unibo.it/giannoccolo.

Glaser, B. G. (1964). Comparative failure in science. *Science, 143*,1012-1014.

Granovetter, M.S. (1973). The strenght of weak ties. *American Journal Of Sociology, 78*, 1360-80.

Hermanowicz, J. C. (1998). *The stars are not enough-scientists–their passions and professions*. Chicago: The University of Chicago Press.

Hughes, C. (1945). Dilemmas and contradictions of status. *American Journal of Sociology*, *50*(5), 353-359.

Knorr Cetina, K. (1981). *The manufacture of knowledge - An essay on the constructivist and contextual nature of science*. Oxford: Pergamon Press.

Knorr Cetina, Karrin (1999). *Epistemic cultures: How the sciences make knowledge*. Harvard: Harvard University Press.

Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago: University of Chicago Press.

Latour, B. &Woolgar S. (1979). *Laboratory Life: The construction of scientific facts.* Princeton: Princeton University Press.

Mahroum, S. (2000). Highly skilled globetrotters: mapping the international migration of human capital. *R&D Management*, *30*(1),23-32.

Merton, R. (1960). *The sociology of science. Theoretical and empirical investigations.* Chicago/London: The University of Chicago Press.

Morawska, E. (2009). Badania nad imigrają/etnicznością w Europie i Stanach Zjednoczonych: analiza porównawcza. *Studia Migracyjne-Przegląd polonijny, 1*. Retrieved From http://www.kbnm.pan.pl/images/stories/artykuly/Morawska-artykul-2009-Nr1.pdf.

Newman, K. (1999). *No shame in my game.* New York: Russel Sage Fondation.

Pestre, D. & Dahan, A. (eds) (2004). *Les sciences pour la guerre, 1940-1960.* Paris: Presses de l'EHESS.

Reader, W.J. (1967). *Professional men: The rise of the professional classes in nineteenth century England.*New York: Basic Books.

Reskin, B. F. (1978). Scientific productivity, sex, and location in the institution of science. *American Journal of Sociology, 83*, 1235-1243.

Sayad, A. (1999). *La double absence. Des illusions de l'émigré aux souffrances de l'immigré*. Paris: Le Seuil.

Smith-Doerr, L. (2004). *Women's work: Gender equality vs. hierarchy in the life sciences*. Boulder, CO: Lynne Rienner Publishers.

Stephan, P. (2012). *How economics shape science.* Harvard University Press.

Wallernstein, I.(1974). *The modern world-system, vol. I: Capitalist agriculture and the origins of the European world-economy in the sixteenth century.* New York/London : Academic Press.

Wagner, A. (1998). *Les nouvelles élites de la mondialisation. Une immigration dorée en France.* Paris: Presses Universitaires de France.

Wagner, I. (2006). Career coupling. Career making in the elite worlds of musicians and scientists. *Qualitative Sociology Review*, *2*(3). Retrieved From http://www.qualitativesociologyreview.org /ENG/archive_eng.php.

Wagner, I. (2011). *Becoming transnational professional. Mobilność i kariery polskichelit naukowych*. Warszawa: Wyd. Scholar Wydawnictwo Naukowe.

Wagner, I.(2013). What is "genius" in arts and "brain drain" in life-science. The relevance of Chicago School heritage in the studies of professional elite-worlds. In J. Low & G. Bowden (Eds), *The Chicago School Diaspora - Epistemology and Substance* (pp. 272-286). Canada: MacGill & Queens University Press.

Wagner, I. (2014). Works and career aspects of ghetto laboratories. In K. Pripic, I. vanan der Weijden & N. Ashuelova (Eds), *Careers in Science* (pp.145-170). St. Petersburg: Institute for the History of Science and Technology. Retrieved From http://ihst.nw.ru/images/books%20in%20pdf/Researchng_Scientific_Careers_2014.pdf.

Wagner, I.(2015). *Producing excellence – Making of a virtuoso*. New York: Rutgers University Press.

Wierzbicka, A. (1994). 'Cultural scripts': A semantic approach to cultural analysis and cross-cultural communication. *Pragmatics and Language Learning*, *5*,1-24.

Znaniecki, F. (1940). *The social role of the man of knowledge*. New York: Columbia University Press.

Zuckerman, H.(1977). *Scientific elite: Nobel laureates in the United States*. New York:The Free Press.

Biographical note

Izabela Wagner has been an associate professor at the Faculty of Philosophy and Sociology at Warsaw University in the Center for Sociology of Work and Organization, since 2008. Presently she is visiting professor at Cagliari University (Italy).

E-mail: wagneri@is.uw.edu.pl

Universidade de Varsóvia, Institute of Sociology, ul. Karowa 18, 00-927 Warszawa, Poland

* **Submitted:** 03-04-2015
* **Accepted**: 02-07-2015