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RESEARCH ARTICLE

RECOUNTING HEALTH AT WORK COUNTS

A Tale of Numbers and Their Uses

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ABSTRACT: In the early 2000s, occupational physicians at Aero, a major aerospace group, teamed up with researchers to build a new type of statistics. Embedded in the EVREST (EVolutions et RELations en Santé au Travail) scheme, these statistics rely on a questionnaire based survey administered during the medical check-up. Each year, the occupational physicians report the survey results to the social partners in several workgroups. Through the use of statistics issued from EVREST, the physicians wanted to display a link between working conditions and health issues, which was often ignored by the institution and its representation of occupational health and safety. The purpose of this article is to analyze the use of quantification, its genesis and its effects. Focussing on the "conflicting uses" around the numbers, this article demonstrates that their production is part of social relations that contribute to the redefinition of the goals initially assigned to instrument by their creators. Finally, the analysis aims to contribute to the reflection on the social conditions for the development and acceptance of alternative indicators.

KEYWORDS: health, indicators, occupational physicians, quantification, working conditions

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1. Introduction: the quantification of “Health at work”

For years, at the company level, physicians, ergonomists, engineers and other professionals in charge of health at work, have been relying on various forms of measurements. But these are mostly either very limited in their time span or targeted at a unique aspect of the work environment (such as noise), or derived from administrative statistics (such as accident at work statistics). In the early 2000s, occupational physicians at Aero, a major aerospace group, teamed up with researchers to build a new type of statistics. Embedded in the EVREST (EVolutions et RElations en Santé au Travail) scheme, these statistics rely on a questionnaire based survey administered during the medical check-up. The survey is conducted every year. It aims to monitor a number of work and health characteristics and their degree of correlation. The questionnaire, which relies on both the employee’s point of view and the doctor’s expertise, investigates four areas of interest: work conditions (working hours, work place constraints, work assessment, autonomy, physical load, chemical toxicity), training (access to training and tutoring opportunities), way of life (sport, tobacco and alcohol consumption) and health status (various health disorders, work impediments, medicines consumption and the diseases category, which includes neuropsychic disorders, as well as cardiopulmonary, digestive, skin and joint conditions). Each year, the occupational physicians report the survey results to the social partners in several workgroups. The results are broken down into categories that include age, gender, enterprise sector, and occupation¹.

These physicians developed and defended EVREST because they believe that, at the company level, the production of statistical indicators increase the social audience of the phenomenon being measured. These physicians felt undermined both by the questions opened in the public debate regarding the ability of occupational medicine to actually preserve employees’ health, and by the ambiguity of their status. They were also bored with seeing their recommendations not being followed. Thus, they considered statistical arguments as a source for greater legitimacy and as a resource for argumentation. Through the use of statistics issued from EVREST, the physicians wanted to display a link between working conditions and health issues, which was often ignored by the institution and its representation of occupational health and safety. They also aimed at keeping a stake in the definition of their occupational territory by developing and using new categories. They hoped that these new indicators would help change the representations and create new opportunities for discussion on the subject of occupational health inside the company.

We rely on this study of the use of “stactativism” (Bruno, Didier and Vitale 2014) to analyze its genesis and its effects, as well as the challenges and setbacks which occurred during the process (See Textbox 1). In this article, we take an insight into an unusual subject in the field of the sociology of quantification: the figures developed by corporations on the topic of occupa-

¹ This quantification scheme is still running in 2013.

tional health. We thus aim to contribute to the reflection on the social conditions for the development and acceptance of alternative indicators (Jany-Catrice 2010; Didier and Tasset 2013).

For this purpose, the first part of the article will focus on the EVREST scheme genesis. We base our reflection on sociology of quantification, and thus our analyses will start upstream from the data production so as to identify the issues, which appeared during the development of EVREST and the underlying assumptions behind the scheme (Desrosières 1993, 2008). By widening the scope to the story of the actors who produced and defended EVREST (Porter 1995; Penissat 2010), we can see that it is an embodiment of theoretical concepts on the ties between work and health, along with actors' professional issues.

In the second part of the article, we'll describe how the statistics produced with EVREST were disseminated in Aero, how they were used or not, how they were debated. We'll then analyze what this practice of quantification lead to, compared to the purposes initially defined by the producers of statistics. Quantification schemes themselves convey a "political and social philosophy" (Desrosières 1993) but as they are incorporated and translated into other social and political philosophies, they do not necessary lead to the fulfillment of their original underlying philosophy (Eyraud 2013).

The development of guidelines for the use of statistics, far from being the product of the sole will of their creators, are the result of interactions between social actors who all have expectations and assign them a role, which map possible acceptances and uses of the figures (Beck 2005; Didier, Névanen, Robert and Zauberman 2009). Regarding the indicators issued from EVREST, the physicians' capacity to control the use of "their" figures, so as to support the audience of health and work issues at the workplace, was a major stake.

The following paragraphs address this question. We detail how the figures are disseminated throughout organizations, when and how actors use them. We shall also analyze how these various uses either coexist or are at odds with each other, and how some uses gain legitimacy and are being relied on to define the domain and the appropriate actions within it.

2. The rise of EVREST : Merging occupational stakes, scientific project and the story of its creators.

At the beginning of the 2000s, three actors played a major role in the creation of the EVREST scheme: Françoise Doppler, the human factors manager (HFM) of the Aero group, who is an occupational physician and an ergonomist, as well as Anne-Françoise Molinié and Serge Volkoff, who are both statisticians and ergonomists. The creation of the EVREST scheme is as much consistent with a school of thought and action as it is the results of these three individuals' trajectories. In order to understand this consistency, we need to see how the EVREST scheme creation fit in its designers' conceptual frameworks and their life courses.

2.1. Building new "numbers": publicity and coordination stakes

After a first stint as an occupational physician, Françoise Doppler began her career as head of the security department in the Aero group in 1982. During her medical studies, she had first chosen to major in psychiatry, then trained in psychosomatic medicine and eventually headed on to occupational medicine. Once she graduated, she trained in ergonomics and met, among others, the founders of “ergonomics of activity”, with whom she collaborated on several projects after joining the Aero group.

As head of the security department, Françoise Doppler sought to put the “ergonomics of activity” theory into practice. This theory defends a unique perspective of man at work and of what occupational health encompasses. At its core, it relies on the concept of “activity”, which focuses on what takes place in between “real work” and “prescribed work”. Since the technical system and employees aren’t as stable as prescribed work, work cannot be reduced to the strict application of technical tasks or to the predetermined activities through standardized guidelines. Working always implies to “re-conceive” a task in order to perform it, to take into account the variability of work situations, and to be able to achieve given objectives, preserve or even build one’s health, skills and identity. This re-construction is facilitated or hindered by technical and organizational schemes. That is why work organization is at the heart of occupational health. This perspective goes against the individualistic and behaviorist approach to risk at work, which was the prevailing conception among engineers and managers at Aero. This conception implies that the production process holds no surprise: One only needs to apply the organizer requirements in order for the system to work and be efficient. Accidents can only be the result of « human factors »: errors in the carrying out of the prescribed tasks, ineptitude, carelessness, and side effects of routine or addictive practices. Hence, preventive measures aim at correcting and « controlling » behaviors. Which means that workers need to follow prescriptions, as much as they need to be informed on risks and follow a clean lifestyle. These two approaches promote two different, almost competitive conceptions of occupational health: One is centered on the individual, considered as responsible for his own health, and the other promotes a conception of health at work embedded in social contexts and relations.

Françoise Doppler promoted the integration of the ergonomic approach into Aero’s industrial projects in order for real work to be taken into account when designing work organizations. A hundred engineers were trained in ergonomics in a few years. Her staff was progressively integrated into the organizational design process. For that purpose, she expanded her relationship with researchers in various disciplines dealing with occupational health related topics. And, thanks to substantial budgets, she also launched several studies inside Aero.

In 1988, Françoise Doppler became part of Aero’s general management in order to coordinate health and safety staff and occupational physicians. Relying on her legitimacy, both as a scientist and as a technician, and on her organizational authority, she carried on with her project to make employees’ health issues taken in consideration in the design process - being it organizational or technical.

From the beginning of the 1990s, the company entered in a long restructuring process which made the work of Françoise Doppler and her staff increasingly difficult. She believes that this period led to an evolution of her relationship with the production sites and a subsequent reflec-

tion on how to make durable cooperation and tie more closely the industrial and humane (health related) issues.

Françoise Doppler: *"The sites managers changed often, and reorganization projects were beginning to pile up, it was becoming increasingly difficult to link work aspects, to health, to the human resources and to the technical aspects at site level. We were lacking common tools which could help us describe health related issues and stakes, and which could be used to help managers make decision. At this point we made the hypothesis that the administrators and site managers were in lack of accurate workplace health indicators they could track."*

And thus, the idea of developing workplace health indicators was born. These indicators were a form of intermediary objects that could play a mediating role between actors bearing diverse, if not contradictory, logics. These new indicators were expected to depict health at work, raise the alarm to the actors of the company, alert them about the health of employees, help decision making in matters of human resources or work organization design, as well as (re)create links between performance and health at work. Beyond, these indicators also had to be easy to use and to analyze, in order to help the company doctors report on their actions to top and site management, to social partners and management committees, as well as external control authorities every year.

Indeed, the idea itself of using indicators was part of the reason why Françoise Doppler had acquired her position at the Aero group. The enlargement of her responsibilities and the increased visibility of occupational health, which had become part of the group management priorities, seemed to justify achieving a greater degree of accountability.

2.2. EVREST, a laboratory centered on occupational health

According to Françoise Doppler, this project needed to be grounded in scientific theory in order to ensure that the indicators would be rigorously developed, and establish their legitimacy. This led her to turn to two researchers with whom she had previously worked: Anne-Françoise Molinié and Serge Volkoff. They had previously met in the 1980s. At that time, all three of them were members of networks of researchers interested in occupational health where "ergonomics of activity" theories were growing. They engaged in numerous collaborations and Aero became a place for fieldwork for both researchers during the 1990s.

The first debates about the development of a "quantifying scheme for occupational health" were the results of this long-standing collaboration between individuals who shared a great number of views.

This collaboration is also most certainly linked to the positioning of the two researchers. Both of them are well acquainted with networks of occupational health's "activists" but also with more "apolitical" occupational physicians groups. They hold a legitimate place in the world of academics, all the while supporting the development of a connection with the business community.

Since the middle of the seventies, these two scientists have worked, inside the National Institute of Statistics and Economic studies (INSEE) to the development of the French statistical scheme for the assessment of work conditions and occupational hazards. Fifteen years later, once their task had been fulfilled, they left the world of public statistics to create, along with other researchers, the Centre for Research and Studies on age and working conditions (CREAPT). This Center was atypical in the scientific community mainly because its board of direction included representatives of the public administration as well as of several private companies. From its creation onwards, this group has been contributing to the research on relations between work and health, as well as to the debates on the use of statistics in studies of work conditions.

In 2000, when Françoise Doppler shared her ideas about developing new “health at work” indicators with Anne Françoise Molinié and Serge Volkoff, the duet grabbed the opportunity without hesitation. The design of such a scheme was an opportunity which opened doors for future capitalization and research projects.

2.3. What “counts” in occupational health issues

Between January and June 2000, the trio set the general principles of the scheme. The tools developed for the national statistical surveys on working conditions inspired these principles for a significant part, on line with the theoretical heritage of the Activity-centered ergonomics school. This approach promotes a specific view on occupational health issues, which subsequently guides the choice of statistical categories. The focus doesn’t rest as much on the specifics of the work, which causes health issues as on the web of relations between several aspects of work and health. On the data collection methodology side, this theoretical framework also recommend to interview employees on their working conditions.

Thus, beside the search for hard working conditions (time constraints, physical hardship of work), the EVREST questionnaire also explores how employees can be active to preserve and improve their health. Some questions focus on recognition at work, on cooperation opportunities, on the possibility of doing quality work, and on the training opportunities. It also explores topics well known to be psychosocial risk factors: demands at work, (especially time pressure), autonomy and room for maneuver, conflicts of values, mutual aid opportunities, emotional demands, working conditions and employment insecurity. Regarding health, the questions focus on health disorders (pain, weariness, sleep disorders, edginess...) and not solely on pathologies. These disorders aren’t (yet) part of a clearly diagnosed illness. They aren’t necessarily serious but can hinder every day’s life as well as the work life, and become a burden in the long run. This point of view is related to an expanded definition of health in which it is not defined as just lack of diseases. This definition of health takes into account how interactions at work are related to a state of health and how a state of health is related to work.

The EVREST design principles also took into account the specifics occupational medicine practice. For instance, in order to not increase too much the physicians’ workload and the length of medical visits, the questionnaire was not very long.

Once designed, the EVREST scheme needed physicians who would actually make it come to life through their commitment and their involvement.

2.4. Issues of legitimacy and quantification

After the trio introduced EVREST to the Aero group occupational physicians, a number of them decided to support and contribute to its implementation, which was to take place in 2001. While having different profiles and trajectories, they did share the same perspective on the odds that their profession was facing and how quantification could help. Since the 1970s, National Authorities and the business community constantly questioned French occupational medicine on its efficiency and usefulness. For the physicians who had decided to contribute to EVREST, occupational medicine suffers from the ambiguity of its mission and of its status. By law, occupational physicians can only give notices of fitness while their role is defined as “mainly preventive” since they are supposed to “help avoid any work related deterioration to employee’s health” (Act of October 11 1946). And, their actual activity is restricted to giving advice without any means to enforce their expertise. Furthermore, these physicians are employees of the same company as their patients. Considering how health at work is a hot topic in the company, there is a tension between their position of subordination and the independence as physicians, which is granted by the law. The physicians have to try to get around these contradictions by relying on strategies to give visibility to occupational health issues and convince their employer to follow their recommendations.

The development of new statistical tools was perceived as one of the possible strategies. Through the use of figures, which all the actors of the company naturally considered neutral and objective, the physicians wished to give visibility to the difficulties they were facing, mostly the work related health disorders, and to provoke debates about them. The physicians who involved themselves in the EVREST project were convinced that statistical arguments were more easily integrated into managerial schemes and reasoning than clinical or qualitative ones.

Furthermore, the scientific legitimacy of Anne-Françoise Molinié and Serge Volkoff as well as the recognition of their expertise in both statistics and ergonomics, also played a part in the occupational physicians endorsement of EVREST. They felt that the collaboration with these researchers ensured the EVREST scheme’s value and its scientific reputation. The scientific legitimacy of the scheme was a major stake for the physicians since they wished for their indicators to be taken into account. Quantification and the establishment of a scientific credibility aimed at reinforcing their weakened and undermined position inside the company.

Furthermore, the number of physicians who were involved in EVREST was all the more substantial since the EVREST scheme was based on a definition of occupational health shared by most of them.

In fact, some actors of the company, mainly managers, had tried to limit the expertise field of occupational physicians to include only medical and hygienist perspectives, which centers only on the individual and less on work and its organization. The physicians wished to use the statistical categories of EVREST to defend another conception of occupational health.

Nonetheless, the intents and conceptions behind EVREST development do not tell the whole story of this scheme and what it can result in. The focus must then switch to the places where the scheme is being used, to the projects it is part of, to the stakes it creates and to the ways it can be used. Now that EVREST genesis story has been told, The focus must be put on how EVREST was launched at Aero, how figures traveled and how they were used, by whom and how it served the purpose of its inceptors. This leads us to follow occupational physicians at report meetings and to analyze how actors, inside the Aero group, endorse these indicators and what use they make of them.

3. The dissemination of EVREST and the question of its use.

Each year, the occupational physicians report the results issued from EVREST to a number of committees within Aero either orally or through written accounts. To understand how the figures are being reused, we must go back to the interests that EVREST fostered and how the numbers have been circulated.

3.1. The implementation of EVREST: attractiveness of the quantification scheme and haziness of its definition

The physicians' objective was to circulate their figures throughout the company, to showcase them each year to the social partners in order to assert their representations of occupational health issues and to have a hand on how the issues are defined and how they are treated.

The attractiveness of figures, which the social partners consider as being "neutral" and "objective", facilitated their dissemination and encouraged the implementation of EVREST. The management boards expressed their interest for this language which seemed to reduce complexity and to keep political issues at arm's length. The employees representatives did not care as much for statistics but they did share with the physicians the opinion that occupational health lacked a certain authority and they did believe that quantification could be a tool of authority.

EVREST was also welcomed without much resistance because Aero, as a company, didn't shy away from occupational health issues. They were deemed socially relevant and could be enunciated, which also means that they could be acted upon. Following the same process that sociologists of quantification have described for other fields (Desrosières 1997), the idea of quantifying occupational health within the Aero group has come after the qualification process that allowed the naming and the acknowledgement of the issues pertaining to it. This doesn't mean that all stakeholders shared the same definition of these issues. Physicians recruited allies who shared their interest with translating occupational health issues into statistical indicators by giving a hazy definition of the schemes aims. They agreed that it should be used but they did not necessarily agree upon what occupational health involved. This allowed other actors to

adhere to EVREST while pursuing other interests than those of its creators. For instance, site management and human resources approved of it because they felt it was a “tool of proof” of the reality of actions taken to understand the issue and act upon it².

3.2. Numbers on a stage

Each year since the EVREST scheme has been in use at Aero, Physicians, with the support of the researchers, have strived for an efficient formatting of statistics, which would facilitate their circulation. They display their results in the same way that administrators do. They rely on eye-catching graphs to condense information and use dashboards to highlight the changes from one year to another, as well as to provide comparisons between groups inside the company or subsets of the population. They provide a very stable, almost routine, report of the figures, very close to those produced by administrators on other subjects. Physicians pay attention to display results in a manner that promotes dialogue.

A physician working at Aero gives the following account, which summarizes the whole practice: “*displaying shocking numbers doesn’t serve any purpose, it has to catch interest, to surprise, and to also raise questions but it must not scare away. It shouldn’t be all black nor too rough.*”

The figures, meant to be used by the paritary committees, take into account this requirement for balance. Physicians build an “acceptable” set of figures, curbs and commentaries, which takes into consideration the former balance between powers, and try to shift it slowly without forcing it. They are careful in depicting a variety of situations, in showing the increase in constraints, expositions to toxics, and damages done to health in certain places and, in others, the more reassuring situations.

Each time it is deemed possible, they articulate EVREST with other schemes launched within the company: An assessment of an agreement on employment of older workers, a study on stress factors, another one on hardness at work. These “attachments” (Latour 2005) lead to the diffusion of EVREST and the enlargement of its public scope of intervention. In the early years, physicians only reported the figures to the social partners. In the course of time, they have increased the numbers of bodies to which they report these figures: accident-prevention committees, board of directors meetings and informal work groups.

The durability of EVREST, and of the spaces for debates it opens up, are a cause for concern among occupational physicians. They know its sustainability depends on the actors making use of the figures it provides, but at the same time they fear the institutionalization of the use of these figures.

² These actors refer to the absolute obligation to ensure the safety of the workplace against occupational hazards and occupational diseases. (Court of cassation ruling dated February 28 2002 and April 11 2002)

3.3. Conflicts over use

The physicians promote the use of statistics in a manner which is compatible with a descriptive perspective and which leads to debate³. However, other uses are being developed. The scheme's hazy identity and the part it plays in several Aero projects as well as its formatting strategy facilitate the circulation of the figures and their use by other actors. As the scheme expands, it gathers interests, some of them contradictory, and new expectations are voiced which may have an effect on the use of the figures.

As EVREST becomes embedded in logics and aims which differ or even oppose one another, physicians find themselves struggling to control and defend "their" use of figures against management and among the joint bodies.

For example, within the framework of the work-related prevention process, physicians have used EVREST statistics during the diagnosis phase on each site. Their results depicted a rise in the number of employees exposed to time-related stress in the last five years but also that it depended on which site they belonged to. They demonstrated that when a strong time-related stress is added to poor autonomy or to a lack of opportunities for cooperation, employees tend to report health disorders, mostly joint or neuropsychological disorders (weariness, edginess, sleeping disorders). Based on these results, Physicians encouraged site management teams to try to understand concrete work-related issues and to look for improvement possibilities for work organization, anticipation and also for the adaptation of tools to the constraints of the activity. Instead, the management teams choose to use these results to rank Aero's sites on a monitoring scale based on the percentage of employees exposed to time-related stress. The aim was to incite the badly ranked sites to take action to improve their results.

When the physicians uncovered this project, they asked that the work-related stress agreement explicitly include another type of use of the result, combining qualitative and quantitative sources of information,, along with a subsequent debate on both of them. They were denied. The insertion of EVREST in this agreement was a sustainability issue for the scheme and an issue for occupational medicine involvement in stress at work management. Because of the repeated and routinized circulation of figures, the concept of "time pressure", which originated from the EVREST questionnaire, was increasingly used at Aero to describe the difficulties that employees were facing. This characterization process came with a new definition of the stakes by the Aero physicians, which go beyond the individualistic perspective of "stress" that used to prevail. At the same time, the use of a monitoring scale based on a unique indicator, which would determine a threshold for action, undermined the clinical and qualitative arguments and detracted EVREST from its original purpose. Tensions arose between quantification practices, as envisioned by the EVREST inceptors, and the need for the scheme to take place within Aero. The same tensions could be noticed in the use of comparisons.

³ They were influenced by the work of Anne-Françoise Molinié and Serge Volkoff, who have since then conceptualized the comprehensive quantification approach (Volkoff and Molinié 2010; Volkoff 2005).

3.4. *The temptation of assessment*

Whenever physicians report the figures issued from EVREST, they give comparisons between the results of subsidiaries, between sites and their respective subsidiaries, and between sectors in each site. These presentations' formats address communicational and cognitive issues. Physicians rely on it to mimic the management format of presentation, in order to provoke interest and gain legitimacy. In the physicians' point of view, these comparisons can also be part of a more comprehensive approach: acknowledging the gap between situations within the same site or the same subsidiary can lead to researches relying on a combination of statistics and other types of data, on what contributes to the workers' health and what undermines it. Physicians however face difficulties to pursue this kind of project because they are faced with the more prescriptive and normative uses of the indicators and the difficulties of debating on figures. The comparisons they had made had "provoked interest" among managers but they now had to face the normative practices.

Two approaches make use of comparisons: the "descriptive" approach, which aims for comprehension, is promoted by the occupational physicians and the "assessment" approach which aims for ranking as well as objectives and priorities definition. The former is concerned with the underlying processes, which lead to the results and sees statistics as a tool for debate. The latter is centered on defining a norm, thus indirectly indicating what an acceptable standard is. For instance, the company's average result tends to be used as a standard and the results inside the subsidiaries are considered to be either reassuring or worrying in respect to it. This amounts to stating that the average level is objectively average, neither good nor bad, which the physicians do not agree with.

The definition of objectives and their assessment supersedes the analysis of the facts that are highlighted by the descriptive part of the quantification scheme. The focus on levels, comparisons, rankings, as well as the definition of objectives, leads to circumvent the issue of the role played by the working conditions in what is observed.

The nature of resources available to the physicians to impose the descriptive approach and to control the use of "their" figures is a key question. They express difficulties in spreading a comprehensive use of figures in an environment where the assessment approach is dominant in the use of indicators. Statistical attributes alone seem insufficient to reinforce the authority of physicians and give legitimacy to "their" use of figures. This is rendered all the more difficult because of the position held by physicians in the bipartite committees for health and safety, and their will to denounce situations which are made invisible in the usual representations of occupational health. Thus, they may have the feeling that "We are not good enough", which tends to lead them to use the statistics rather with an assessment approach instead of a descriptive one. The limited speaking-time they are allowed, along with their limited mastery of statistics and their will to adopt the language of management, in order to provoke interest among the decision-makers, lead physicians to adopt such formulations because of their rhetorical efficacy. These practices, however, confuse the issues and make it harder for physicians to impose the use of statistics they are supporting.

3.5. Impediments to the discussion of statistics

Physicians bear witness to the difficulty of setting up a debate on the use of statistics issued from EVREST within Aero's representative bodies. As previous sociology of quantification studies have shown, Figures can be seen as "black boxes". What they display is seldom questioned, as if they were revealing a universal reality and a preexisting truth (Desrosières 1993). Impediments to discussion are linked with the characteristics of their integration by the actors. In addition, they are also linked with the characteristics of the committees in which the figures are being circulated, the social relations within them, and the object of the discussion: the relationship between work and health.

In Health and Safety Committees, avoiding to discuss the figures and their interpretation come down to avoiding conflicts and controversies about the relationship between health and work. While management would rather avoid the social side of the debate, the Employees' representatives fear being dependent on a scheme which would lessen their expertise issued from the ties they have woven with the employees.

These configurations reduce the scope of possible collusions between occupational physicians and other stakeholders in the company on a descriptive and comprehensive use of figures, which could benefit from a discussion on their interpretation. They also bring to light on how much social partners face difficulties to acknowledge and assume the intrinsic contentiousness of occupational health issues as well as the difficulties for physicians to stir up and entertain controversies.

Eventually, the stakes behind occupational health are being considered by a growing number of actors. And the ties between EVREST, and numerous projects, actors and bodies have reinforced the position of the physicians. However, as EVREST is part of all these conflicting train of thoughts and objectives, it is slipping from the grasp of physicians: they face growing difficulties to keep their hold on their figures and on the definition of the domain they quantified, which is their perimeter of action: occupational health.

The story isn't yet over and the scheme's uses aren't set in stone. New uses may still be developed for it and its ramifications can be discussed, or even created under the influence of a collusion of actors wishing for a discussion on work and its related issues.

4. Conclusion

This article was aimed at depicting a stactivism practice, which relies on the development of new indicators to unveil elements of reality which are absent in the dominant representations. On the base of EVREST statistics, occupational physicians underline that the work organization features play a core role in the health at work disorders. They change the scope on this issue, since the usual statistics just record the number of accidents and diseases, and the related costs. As depicted in the case studies made by Didier and Tasset (2013), these statistical

products' faith is linked with the net of actors who get together to generate these alternative numbers. Noticeably, the EVREST implementation in Aero relies in a wide extent on the specific profile of the actors (occupational physicians and researchers) who designed and bored this scheme. The case of the EVREST statistics illustrate how the destiny of such projects also depends on how they are used and on how they are reinterpreted. The occupational physicians didn't only need to generate these news figures. They also needed to accompany their reception in order for them to be useful to the cause they were promoting. Indeed, the EVREST numbers circulate inside Aero and are of interest to a large number of actors who make them exist. New categories circulate and help identifying and characterizing occupational health stakes. Although, at the same time, these numbers are being used in ways which are not consistent with the original purpose of their creators. Two major types of uses get in conflict. On the one hand, which we could qualify as an "understanding use", statistics are used to analyze the impact of working conditions on the workers' health. On the other hand, in an "normative and prescriptive use", statistics are used to define targets to reach (for instance, to define a limit percentage of employees exposed to a type of risk). Their course is henceforth linked with how the conflicts regarding their use are being solved. These conflicts help unveil the different ways to define the measured phenomenon and how it should be treated. They also help understand the position of physicians inside the company and of how their limited resources hinder their capacity for imposing or controlling the use of « their » numbers. Finally, these conflicts show that the scientific soundness of methodological principles and of the categorization of items isn't enough to restrict how the figures are being used. Statistics are also constrained by their formatting and how they are being introduced to the public. The resort to statistical arguments formatted according to managers' ideals of benchmarking opens the door to a managerial use of numbers which, because of the balance of power, becomes the use which supersedes the use its creators originally had in mind.

Statistics can be a tool for physicians to advocate for another way of considering the health at work issues but they can also become a tool for other actors who will use them as tools to promote approaches which can be very different from what was initially envisioned. This case gives a sense of how the objectives of such a scheme may be redefined through the interactions between actors, mainly in the struggles for the establishment of a legitimate and institutionalized definition for its use.

From the standpoint of "statactivism" practices, this article propose to open a reflection on how to encompass, measurement processes designed to report on aspects missing in the official statistics, the ramifications which help their circulation and the networks surrounding the use of these measurements which support the approaches of their creators.

Textbox 1: The study of an occupational health quantification scheme

Our study of EVREST took place between 2007 and 2011. Our aim was to be as near as possible to how figures (statistics) were produced and how stakeholders made them their own. Our

methods mixes interviews, observation of statistics production and of reporting sessions as well as a literature review of both company archives and quantification schemes.

Apart from the many informal relations during the four years of research in Aero, we conducted 68 formal interviews with various persons, responding to the following criteria : having contributed to the design of the EVREST scheme; having played a role, in the company, in the decision processes regarding safety and health at work; being able to talk about the history of the changes in the work design, the organization of the company, the issues in health at work. A great diversity of actors was thus interviewed, and most frequently several times: occupational physicians, human resources managers, actors in charge of occupational risk prevention, members of the Health and Safety Committee, trade unionists, head of units and other managers. They were all interviewed on the history of Aero, their own professional path, their view on the health at work issues and the way they are dealt with by the company, their opinion and expectations regarding EVREST, and the use they have of it. The purpose was to draw the framework context, at the Aero company level and the individuals' professional stakes level, in which EVREST was designed and implemented. The purpose was also to identify the various representations prevailing on health at work issues, and on the interest of a scheme such as EVREST.

For the research we also conducted two types of direct observations.

On one side, it was possible, all along the research, to observe to figures making work of occupational physicians. We conducted the observations in the physicians' office, at the company's medical unit, when they analyse the EVREST data, select and format some of them to prepare a slideshow for the social partners or an annual medical report. We also observed eight work sessions on the EVREST scheme and the results, involving the occupational physicians and the associated researchers from the CREAPT. These observations of figures making were aimed to understand the references and information used by physicians in this figures making process, the way they integrated EVREST in their activity and professional constrains, and the forms of cooperation with researchers.

On the other side, between 2009 and 2011, we observed twelve presentations of these statistics by physicians in Health and Safety Committee, committee for professional risks or other more informal groups. With these observations, we had a view on the debates on and around the data, so as to identify the various uses that could be done with them, recount the controversies and debates, analyse precisely the conflicts and arguments between the stakeholders on the quantification methods, the data, their interpretation and their use.

Documents on EVREST were also collected: from physicians' handwritten memos to statistical reports and formal minutes of work sessions and sessions where the results were presented. By analysing these documents, we have been able to recount the steps of the data production and dissemination process. More specifically, the informal documents on the scheme (written memos of the contributors, articles and references they had collected and filed at the design phase) gave a view on all the objects that were put together to build it. With the help of these 'traces' and the stakeholders' speech, we have been able to unveil the references, reflexions, choices, compromises that made up the steps of the production and dissemination process.

Beyond, we also made a systematic analyze of minutes of the Health and Safety Committee on several years. As this committee is the only place where actors contribution to risk preven-

tion in the company meet, analyzing these archives allow to outline the Aero's specific issues regarding health at work, to understand how they are debated and taken in charge by the stakeholders and to analyze the changes in the way these issues are qualified and held. This analyze helped to situate the health at work data production and dissemination process in the specific context and history of Aero.

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