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Inside television audience measurement: deconstructing the ratings machine

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Abstract: Based on empirical research in France, this article proposes a sociological analysis of television audience measurement (TAM), an operation in which people from various backgrounds (statisticians, engineers, marketing experts) coexist to produce numerical representations of television audiences. These are a major, basic "currency" in the television industry and, more broadly speaking, in television culture. This analysis departs from prevalent conceptions of ratings as either "scientific" and therefore faithful representations of audience preferences, or, from a critical perspective, as apparatuses of surveillance and domestication. Focusing on the technology of peplemeters, it analyzes ratings as the product of a highly complex socio-technical network, which produces robust representations of the audience, accepted by a wide range of social actors.

Key words: administrative research, France, audience measurement, ratings, television

We would like to start by exposing a paradox: the "audience" (or, increasingly, audiences) has been a major focus of television research for the last thirty years. Viewers have been scrutinized, questioned, observed and interviewed according to different research traditions, focusing on different groups (e.g., notably the family, Morley, 1986) and using different methodologies. Different representations of viewers have been produced: passive, active, mobilized, semi-oppositional, etc. At the same time, the "audience as figures", in other words the audience which is central to the television industry, has been for the most part ignored by the academia or hastily dismissed as an "administrative", marketing-based vision of audiences.

Academics tend to narrow down the activity of television audience measurement (TAM) to some of the numbers it produces, known as "ratings"; and those are criticized for their effects on culture or on a specific cultural field, such as journalism (notoriously, but without originality, by Bourdieu, 1998). In a less pessimistic tone, the link between ratings and the degradation of culture has been made in the US as well (e.g. Gross, 1997: 1348). Critics consider ratings with a strange mixture of respect (for their "accuracy") and reject (for their "effects").

There have been some more sophisticated approaches to ratings. Smythe (1977, 1981) adopted a neo-Marxist approach to analyze the part played by the "commodity audience" (measured by ratings) in the political economy of the media, inviting his colleagues to pay less attention to media text, for him a "free lunch" meant to attract audiences to the media in order to sell them to advertisers. This has triggered what is known as the "blind spot" debate. However, like Smythe himself, most authors ultimately assumed that audiences are accurately "represented" by ratings, at least from a quantitative point of view. Meehan (2002) has engaged the question of representation, which will be central to this paper – looking at the way in which and the reasons why the ratings industry selects and prioritizes certain categories of viewers against others. Outside this debate, Ang (1991) has produced the main piece of work about the way broadcasting organizations deal with audience representation, with much skepticism about the representative value of ratings. In the US, Buzzard (1990, 2002) has analyzed the history and the economy of TAM. Miller's seminal article (Miller, 1994) has not inspired much research. Napoli (2005) has shown the political implications of changes in measurement methods for the representation of specific sections of the audience. Quite recently Balnaves and O'Regan (2011), in an approach similar to our own, and with an international perspective, have examined the practices and conventions by which ratings are produced.

We do not consider the technical validity of ratings or its effects on culture. We treat the quantification of audiences as a socio-technical mechanism, which produces ratings in a way that can be effective for very different actors, inside the television industry as well as outside. Ratings may no longer be a "blind spot" for researchers, but they remain a black box (Latour, 1987), i.e. a techno-social mechanism that produces things routinely agreed upon and (almost) never questioned. Opening this black box might provide us with valuable insight into contemporary culture, the way it represents its audiences, and the way legitimacy is conferred (or not) upon specific cultural artifacts, especially through quantification (Herbst, 1993: 3)¹.

Television audience measurement already has a long history (Beville, 1988, Méadel, 2010), with a variety of technologies used for representing, and calculating, audiences (face-to-face interviews, phone surveys, diaries, experiments with "passive" measurement...). We will focus on a specific apparatus, the "push-button audimeter", or peplemeter (PM) and on the French market, although not on French specificity. The fieldwork is based on Médiamétrie, the organization that manages television audience measurement in France including analysis of some of its archives (see below) and interviews of professional actors. We have investigated 1) the way this organization which represents conflicting interests produces a sense of neutrality and validity, 2) the conception of the viewer embedded in the peplemeter, still the "state of the art technology" for measuring viewing, although major changes are on the way (Napoli, 2010), and 3) the recruitment and management of actual panel members who are supposed to fit this conception of the viewer.

MANAGING TAM: THE "NEUTRAL" ORGANIZATION

Audience measurements are not an ordinary product on a market where consumers can choose the best and change easily: they are the standard by which to measure the value of the "product", namely Smythe's "commodity audience". The actors on the market need a single, accepted currency. This has nothing to do with the technical quality of the measurement work *per se*. Two measurers using different methods of sampling and different technologies will produce different figures. There have been some situations of coexistence of different figures, but never for long in situations where commercial competition prevails (Méadel, 2010, Balnaves and O'Regan, 2011).

In most Western countries, the professional literature generally considers that the best solution for managing TAM is the JIC, (Joint Industry Committee) which reflects this acute need for consensus. Various partners are invited to the table: public and private broadcasters, advertisers, publicists; they form a committee which puts out to tender a contract with different research companies. It seems that the term and the method were introduced in the seventies in the UK for various media (Baker, 2000), but the JIC as an international acronym spread in the eighties and the nineties, with commercial television and the rise of PMs. A working paper by the World Federation of Advertisers (2001) underlined the advantages of JICs over other methods such as purely commercial operations or "in-house" ratings, arguing that the JIC model provides "good value for money" since all users share the costs, and that it is "the most reliable form of research since it has the largest number of interested parties who examine the technical procedure" (2001: 5). The WFA is willing to accept the relatively slow and cumbersome character of the JIC model, as it claimed that "reliability" has to come first. However, JIC is by no means the only model, and there are many ways to produce audience figures. In each national situation, the partners have to find their own way of insuring credibility and neutralizing "particular interests" (Syfret, 2001: 57).

When going in the market to find contractors, JICs need to strike a delicate balance: competition is scarce as investment costs are very high and the chances of profit not immediate, yet JICs are wary of monopolies. Since the eighties, the trend has been towards increased concentration and internationalization, and "it has been more difficult to find contractors for television audience measurement" (former scientific director, Médiamétrie). Today, there are three major international players in the field of TAM: AGB-Nielsen (a joint venture created in 2004 between former competitors), TNS (Taylor Nelson Sofres), and GfK Telecontrol.

In France, the situation seems to be entirely original: the subcontractor and the JIC are integrated in a single commercial company, Médiamétrie. This is a rather unusual company, enjoying a double monopoly, for both organizing and directly managing TAM. Therefore, the company has to work very hard at ensuring and maintaining its professional credibility. Born in 1985 from a public organization working for public television stations, Médiamétrie manages the panel, specifies the way PMs are built, and orders them from the manufacturers. While a JIC has few permanent employees, Médiamétrie has a whole building with five

hundred employees and had a turnover of €58m in 2008. Its shareholders include major market players (TV, radio and advertisers). Médiamétrie does not call for tenders, which JICs do at least every few years. How can clients be sure that the measures are produced in a professional, "neutral" manner? The answer the company provides is threefold, based on science, control and consensus.

First, Médiamétrie presents itself as more of a Research and Development company than a commercial one, with much staff coming from schools of statistics and engineering, and a department of "analyses and scientific methods" (with a staff of 20), and another for "development of measurement systems" which, as several of our interviewees proudly emphasized, employs 15 people, mostly engineers. Second, like other audience measurement organizations, the organization stresses that it is tightly controlled, both for its technical work and for its management. Most of our interviewees, starting with the PR officer, emphasized the high number of controls, conducted by various audit firms. Some appeared at the birth of Médiamétrie, and are still active today, e.g. the CESP (Center for the Study of Advertising Media), a non-profit organization founded in 1964 by the advertising industries to carry out surveys, which regularly audits Médiamétrie (after having been its rival for a while). "It can go very far, they can follow our field agents, and they might decide to focus on a specific point like the problem of statistical weighting" (PR officer, Médiamétrie).

Third, and of particular importance, the organization emphasizes the role of consensus through "the partners' direct participation in making major decisions" (DG, Médiamétrie). Advertisers, agencies and broadcasters meet in the relevant committees (for television the "audimetric committee" whose minutes we have analyzed) and are actively involved in decision-making regarding the structure of the panel and the specifications of the PMs. Some information, however, has to be kept secret (see below). The chairman of the company technically has the right to vote but, in order to demonstrate his/her neutrality, never uses it and manages the committee so as to reach consensus.

To a large extent, this made our work difficult, as the minutes tend to exclude conflicts, which have been largely dealt with in advance. But we know of major crises, when consensus stopped working for a while and major efforts were needed to mend the situation. This sometimes happens when an unhappy TAM partner goes to the press to denounce some part of the (alleged) black box which, for a short while, will be considered as "biased", "malfunctioning", "defective". The unhappy partner tries to show that the "neutral" arbiter is "in fact" not the spokesperson of the public for the general good, but the hidden representative of one of the partners. This happened in 1987 when Médiamétrie CEO communicated some confidential information to persuade a new commercial channel of the validity of the sampling. Another broadcaster heard about it and went to the press (interview with a former head of research; see also Bourdon, 1994). The crisis was short lived, Médiamétrie's CEO was quick to apologize and strongly re-asserted confidentiality. The black box of TAM was closed again, and went back to the routine production of "reliable figures".

As this example shows, building consensus is not an easy task. All the partners essentially have to trust the organization in charge. They might want some criteria to be abided by for panel recruitment or renewal, but at some point, they must rely, continuously, on the technicians in the field. They are not supposed to know about the composition of the panel: confidentiality is crucial, as publicity would make distortion possible. The quality of the consensus depends on power relations within the television industry at a given moment, and on the relational skills of the individuals who represent the mediator in charge of measurement. Although this has not relation to the technical and statistical quality of TAM, it is a crucial condition for the good functioning of the whole operation.

Is Médiamétrie, which produces television ratings, a faithful if not blind servant of the market, as opponents of ratings would have us think? This servant appears as very active, quite aware of the work it does, and engaged in intensive self-reflexive activity. Furthermore, this "market" is not just a commercial market. In France, the major public channels, which no longer broadcast advertisements in prime time are in the debates of the Médiamétrie committees. Finally, the "servant of the market" is also under surveillance in the press (at least in times of crisis), not to mention in the political world.

THE VIEWER ACCORDING TO PEOPLEMETERS: THE "NEUTRAL" MACHINE

Let us move to the technology used for television audience measurement. Médiamétrie uses a machine that is seen as the "standard technology" for measuring television audience. AGB in Italy and Telecontrol, a Swiss company with links to the national public-service broadcaster SSR and a partnership with German marketing company GfK, developed it first. In 1984, PMs were installed in the UK and Italy (by AGB). From there the peoplemeter quickly spread to Western Europe and the US (Buzzard, 2002). Médiamétrie introduced it in 1988.

The peoplemeter was first based on an audimeter (previously used in countries like France, the US and the UK). The audimeter is a setbox attached to TV sets in homes, which records, every second, if the TV is on and on what channel. The peoplemeter requires a special remote control, with a series of buttons. People have to press their own button when they watch TV (in fact not exactly "watching", as we shall see). During the night, the day's data is sent to Médiamétrie by phone line. This raw data (audience minute by minute, per channel) is then processed according to TV schedules and advertising slots. The processed data is made available to clients by 8 a.m.

The process might seem fairly straightforward. Our Médiamétrie interviewees also suggest that PMs should be recognized as a major "advance" or "progress" in the history of audience measurement. The measurement is made "in real time", and data is "processed automatically". "All they have to do is press a button. Think of when they used to have to fill in a diary a week later and try to remember, often with the assistance of someone who would naturally put pressure on them" (Director of Research, Public Television Station). PMs are

also considered to be better than discontinuous methods used for other media, notably involving self-recall, which are widely claimed to artificially inflate audience sizes.

However, a number of questions have to be answered. PMs are set in homes, defined as the “main place of residence”. This could be considered as a regression compared to phone surveys, which asked if specific individuals watched TV, regardless of place. Collective viewing in bars, cafes, camping sites, etc. is now overlooked. Frequent in the early days of television, it is still practiced “notably for major sports events in cafes, but this is out of the reach of peplemeters” (Scientific Director, Médiamétrie). However, our interviewees saw vacation homes or, more precisely, “secondary residences” (used in France for vacations and week-ends) as more problematic. “10% of families have a secondary residence, and they spend on the average one week-end out of six there” (Scientific Director, Médiamétrie). The question of cost has been a major obstacle here. In the US, a group of broadcasters who reviewed the PM in 1989, in the days of its inception, suggested “measuring all sets including those on boats and in vacation homes” (Gross, 1997: 1348), but to no avail.

Moreover, the PM measures viewing “in the room where the set is located” or, as one should qualify, “are” located: 50% of French households are equipped with more than one TV set in 2008 (Médiamétrie, 2009). This system neutralizes and naturalizes the notion of a “room”. What about very big rooms? What about moving in and out of the room at short intervals? Do cleaners have to press the button (there are two buttons for visitors, yet cleaners are not considered as visitors by Médiamétrie)? What about weak separations within the same room (bookshelves in the center, folding screens)? One might say that these are “marginal situations”, as one of our interviewees stressed. Yet together they raise interesting questions about what is actually being measured, and what is considered as both the statistical and social norm.

Let us accept that “being in a room” is a situation clear enough. A viewer is someone who lives in a home where someone (not necessarily the viewer him/herself) has decided to turn on the TV – unlike the viewer in a bar. This implies a level of “collective intentionality”, however weak. You might have to press the button simply because someone else has decided to watch television. Imagine a home where there is only one set and where the head of the household wants to watch the news. Some people in the room are not happy about this, but are told to remain silent. Is pressing the button about indicating voluntary presence as acknowledging submission? This example makes the point clear: television watching is related to the “politics of the home” (Morley 1986).

Without discussing power relations between family members, one could have started with the question of age. “Pushing a button” pre-supposes a subject able to decide to do so. From what age can this be performed? How is this decision justified? When asked, some of our Médiamétrie interviewees gave different answers: the age when one knows when to press (cognitive ability), the age when one can influence consumption and choose products (commercial influence), the reasonable age according to the different partners (social ability), etc. In the end, the age appears more as a result of set agreement between partners than justified by sociological and psychological considerations. The age varies, first, between the

surveys for different media, which makes things complicated as Médiamétrie is now trying to combine them: "We have six media with six different viewer ages" (Scientific Director, Médiamétrie). With the rise of multichannel TV, the tendency has been to bring the age down for PM users. When the PM was introduced in 1988, the age was brought down from 12 years to six. However, a personal button from the age of 2 was included then and still is (which an adult is supposed to press for the child). Later, the age for autonomous decision was brought down to 4. And the age varies between countries. The extreme case is Australia, where the system even takes into account the presence of newborns...

In short, television viewership according to the PM machine is located somewhere between pure intentionality (the viewer *decides* to watch, sits in front of the set *for watching*), and pure exposure (the viewer – person? baby? – *happens to be* in a room where a TV set is on). This is justified on the basis of simplicity: "People enter the living-room and the TV is on. They know they have to press the button; they don't have to ask themselves if they are watching television. In practice, it amounts to much the same thing..." (Former Scientific Director, Médiamétrie). This decision has many consequences. In the past, in studies by phone or using diaries, people were asked if they had "watched" or "were watching" television. This is no longer the case.

Finally, the system measures a certain kind of relation to television, which is wholly congruent with the evolution of the public discourse on television (including the academic one). As access to television spread, multi-channel television and zapping supposedly made it more of a "background" medium with very different levels of attention (unlike the television of the early days). It could also be considered as a medium appealing to all ages (including infants). This change in the dominant conception was duly recorded in conventions on the use of PMs. It might be said that the PM has had a performative effect: both PM users and television professionals have come to consider it as enough for television viewers to agree to being exposed to a program (not to actively seek it), to qualify as viewers. It might thus have contributed to the new dominant view of the medium, based on weak, tangential relations, not on strong links.

THE "NEUTRALLY OBSERVED" SUBJECT: THE HARD WORK OF PANEL MEMBERS

In order to make sure the "viewer in the machine" has some relation to the real world, the viewer needs to be trained to behave in accordance with the prescriptions of the machine makers. As we will see the "real panel member" is as elusive as the "viewer in the machine", but for different reasons. First, they need to be recruited. Despite the transparency which measurers aim for, being a panel member has many implications. Panel members must accept the presence of an extra box with wires at home: "This is not trivial in a world where people have to manage a whole bunch of wires behind the set" (Médiamétrie Deputy DG); they have to get into a new habit which they will perform several times every day, several hundred (or even thousand) times in their lives. They must press for themselves as well as for little children, remind the guests (who have their own buttons) to press, answer the

phone every now and then, and, once a year, be visited for a full control interview (to check for major changes in household composition, etc.).

It takes "three weeks of practice" to ensure the work is done properly. The word "training" is not used as it does not fit the idea of "neutrality", but it is appropriate. In addition, there are recall systems to remind panel members of what should be done: the machine beeps softly if nobody has pressed a button and the TV is on. When someone turns on the TV, a caption shows up on a small screen on the box asking for identification. When introducing the system, Médiamétrie used a variety of systems to check for validity, especially to assess the risk of people forgetting to press the buttons on their way in and out of the room: "We called people several times... We controlled what was happening abroad, in Italy where they had started earlier and in the UK, and received positive reports /.../. On the whole, there is a balance between people who forget to declare their presence, or to declare their absence: 2.5% of the panel in each case. Since then, Médiamétrie has kept on doing coincidental surveys of this kind" (former Scientific Director, Médiamétrie).

In the US, people are paid for being part of the panel (Buzzard, 1990). In France, the approach is different: "This is not a commercial transaction; people should do it on a voluntary basis. If they get money, it might affect their behavior. The motivation is cultural, people have a feeling that they give their voice, that they are part of a democratic process" (former Executive Director, Médiamétrie). Yet the democratic process presents a paradox: the viewer-citizens are not supposed to express a specific opinion but to represent others by behaving as usual, as if they did not have a PM.

Here there is a delicate balance to be struck. Our interlocutors want some level of conscience, but not too much. "If they feel they have some power, if they involve themselves too much and think they can affect scheduling, it's a disaster. We have asked television channels not to refer to ratings in their campaigns, for fear it might influence panelists" (Executive Director, Médiamétrie). "Ideally, they should forget about the presence of the PM: the less they think about it, the less bias there will be, but they must remember enough, so that pressing the button becomes automatic" (Deputy DG, Médiamétrie).

Do people easily agree? On this point it is difficult to enter the black box. Our interviewees from Médiamétrie give an acceptance rate of about 50%, but one expert at the CESP suggested 30%. We were not able to find out how these (rather high) figures are calculated: how many refuse when first contacted by phone? After an attempt to persuade them? No one seems able to define the exact composition of the population of "refusers". Our interviewees accept the idea that highly educated people are most likely to refuse. However, they add that people with the same characteristics are eventually recruited, and that this therefore "should not" affect representation. But in order to be sure of this, one would have to know what *exactly* characterizes people who refuse...

There is another problem raised by methods of continuous measurement requiring the subjects' participation, "button-pushing fatigue" (as it was called in a broadcasters' 1989 Survey in the US, Gross, 1997: 1348). According to the Médiamétrie deputy DG, "there are two schools of thought here. The first one claims that people will get weary and stop

reporting. The second says the opposite: in the beginning, it takes time to get used to it, but then it becomes a reflex, like turning the light on and off". This highlights a divergence in the way the role of panel members are defined, either as passive witnesses who are somewhat alien to their own practices, or as actors at the heart of the measure itself, whose substantial work is needed to ensure the proper functioning of the instrument. Economic concerns also played a part here: renewing the panel is costly, and it "might be tempting" to keep the same members "on board" for a long time. But this time the scientific approach is on the cost side: on the whole, scientists at the institute wish to show that quality lies with the "old" panelists, as opposed to the advocates of renewal who, based on common sense, say that people grow weary of this repetitive task and should be replaced by new, "fresher" members.

CONCLUSION

Both critiques of ratings and its professional promoters would agree on the fact that the production of ratings is mostly a "technical question", and that a close examination of the work of measurers would allow us to decide about the "reliability" of figures. And they would conclude that those figures are, nowadays, "more reliable" than in the past, that they "reflect" better the "reality" of viewing. A close examination of TAM shows that the technology is by no means "simply measuring something out there". A complicated set of socio-technical conventions has to be agreed upon, which can change according to relations of the partners in the industry (public/private, big/small, advertisers/broadcasters...), the different stages in television history, the technology available and developed at those different stages. The audience can never be considered independently of the instruments used to "measure" it.

Does the relativity of ratings to a certain organizational construct and to certain categories of knowledge make them "less precise", "less representative", or, *horresco referens*, "wrong"? This cannot receive a simple answer. At best, one could write that ratings give a decent approximation of television viewing as defined at a certain time in a certain context, under certain requirements, by and for certain actors. This is not only about "margins of error" (which, it is true, are often forgotten when presenting the results of ratings, or opinion polls). It is about a more fundamental question: what is considered as "television viewing". As we have seen, this simple act needs to be heavily qualified in order to be translated into figures. In many ways, the answer to the question of the "nature of viewing" given by measurers is tautological: "television viewing according to Médiamétrie is what Médiamétrie defines as television viewing at a given moment of history".

In sum, the kind of sociological research involved here is not meant to allow a judgment of the ratings industry from within, but to take one step backwards and to understand the kind of world (and the kind of television world) we belong to: a world which cannot consider the public (the public of culture, but also of politics, see Herbst 1993) without figures. The need for figures is such that the machines which produce figures, at a high cost, with different kinds of expertise (technological, statistical, social), have to be relied upon, and have to be

trusted in a highly routinized way. The close examination of television audience institutions gives us a rare opportunity to unravel one of the ways we construct and naturalize this ubiquitous entity: the public of television.

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