3: The meaning of honesty for research

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Introduction

The last decade there is a long list of fraud and plagiarism in science, each time leading to an incidental superficial debate. However, despite the meaning of honesty is much wider than malversation, there is no thorough and structural debate among scientific researchers and methodologists about what this concept really means for science and for scientific research. Most of them may think that this is a matter of daily life, not of science, and that it at best can be regarded as a philosophical issue. This does not take away that it appears to be a crucial issue for researchers. Without honesty validity as the most important criterion of science, does not have a chance. Researchers encounter, wittingly or not, both many seductions and opportunities to be not fully honest, without being traced.

In this contribution the concept of honesty is elaborated, not only as an humanitarian virtue, but especially as a methodologically relevant issue. First the meaning of the concept of honesty is scrutinized, revealing three components: openness, truthfulness and fairness. In the next three sections these three are elaborated respectively. I finish with an epilogue.

The concept of honesty

Let us take both as a metaphor and starting point the way honesty is used in daily life. Here we expect others to be open about what they think and do, and not to hide away things that we should know. So openness appears to be one aspect of honesty. However, people should not just be open about whatever they think or do. Their thoughts and deeds should also be truthful. And thirdly, we normally regard others as honest on the condition that they do not cheat or victimize us; they should be straightforward in their deeds. In sum honesty appears to be built up of three components: openness, truthfulness and fairness.

What do these three components mean for scholars and researchers? For them openness means transparency in principle about everything they both do and find during the research. We might call this process and product openness respectively. The second component, truthfulness, is core business for scholars and researchers, as truth finding is a major concern of science. It means that they try to adhere to the facts, in what they do on the one hand, and

in what they say or write on the other. Here we make a difference between truth finding and truth speaking as two aspects of truthfulness. And finally fairness means that scholars and researchers come up to what the stakeholders of the research deserve, and that they don't act at the cost of them.

Whether the researcher should be honest very much depends on the questions honest (a) to whom, and (b) when during the research process. There are five categories of actors for whom the researcher's honesty is to be considered, which categories may overlap one another or even coincide: (1) the contractor and/or financier, (2) the users/readers of the research report, (3) the research units, i.e. those who are studied, (4) other researchers in the field, (5) the authors, i.e. scholars and scientific researchers, of scientific publications that the researcher consulted. In the rest of this contribution we call these target groups.

As to the question at which point in time the researcher should be honest there are three possibilities: (1) before, (2) whilst and (3) after the research is executed. As elaborated in section 2, in principle openness towards contractors or financiers takes place before, as to the research units whilst, and towards the users/readers and other researchers after the research. As we will see the answer to the questions of openness (a) why and (b) about what, highly differs for these five groups and three points in time. With the aid of these distinctions we can explore the links between the three components of honesty. There appears to be a kind of hierarchy between them (see Figure 1).

Figure 1. Hierarchy of three components of honesty. A ------▶ B = A may contribute to B
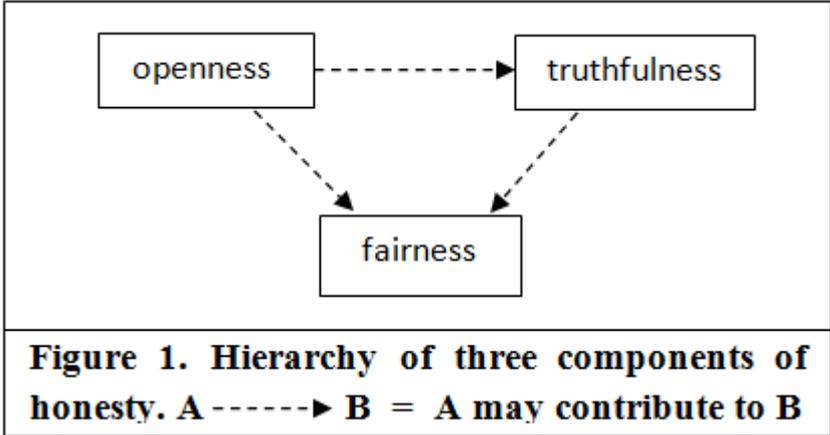
First of all openness of the researcher may contribute to his truthfulness. It is difficult if not impossible for a researcher to be fully truthful without being open. Besides, openness is a precondition of fairness of a researcher. It is a task of the latter, put by either a financier (fundamental research) or a contractor (practice-oriented contract research), to produce

knowledge about the research object. So fairness asks for openness as to the results of his research project. The researcher also has to be open about what he exactly does or did during the preparation and execution of the research. This openness too is what all five target groups in some way or the other need for reasons to be explored in section 2. And finally, truthfulness may contribute to fairness: no fairness without a minimum of truthfulness. The reason again is that all five target groups deserve that the researcher is truthful. Seen from the point of view of the hierarchy here above, fairness is the crucial component of honesty, openness and truthfulness in large part being preconditions for it.

The three components also may put limits to one another. For instance, openness of the researcher towards the persons studied (respondents, observed) may harm the validity of the data, because of biases such as social desirability and strategic behavior that easily can get into play. Thus openness puts limits to truthfulness in the sense of truth speaking. Truthfulness in the sense of truth finding may put limits to fairness. An example is a researcher who does not agree with the preferences of the contractor or financier as to the choice and formulation of the research questions to be answered. Truth finding may force him to stick to his research issue. Another instance of this type of limitation occurs if the results of the research do not come up to the expectations of the contractor or financier, or when the research findings are not in their advantage. And fairness may put limits to openness in cases where openness is not to the benefit of the target group. This may for instance occur when a contractor wants to hide away the research results from competitors.

However, as to truthfulness in the sense of truth finding the researcher does not have any choice. As truth is the central concern of science, it has to prevail regardless the fairness or openness that may be demanded by the target groups. So, if users/readers deserve that the researcher comes up with a result A, whereas the latter is going to find B, he has to stick to B. In other words, fairness can't prevail over truthfulness. Truth is the most crucial value of science, and contamination of it will further degrade science as a respectful institute in modern society.

Openness

In order to make clear the criterion of openness of a researcher as a component of his honesty, two questions are to be elaborated: (a) Openness why? (b) Openness about what? As to the questions of openness to whom and when, roughly the same goes as for honesty in general. Before answering the questions (a) and (b) we have to make a distinction between openness

for and openness *about* something. These are at the input and the output side of the researcher respectively. Openness *for* is what is called accessibility, whereas openness *about* can be labeled as transparency or open-heartedness. Accessibility turns out to be an aspect of truthfulness. In the rest of the present section the concept of openness in the sense of transparency is elaborated.

Openness why

As already mentioned, a first question to be answered is why the researcher should be open, at whose interest? Openness will make the researcher vulnerable to attacks, so it's a legitimate question. There may be six reasons for openness of the researcher: (1) reasonableness, (2) doing justice, (3) getting the research and its findings accepted, (4) a right interpretation of the results by others, (5) control of the researcher, and (6) accumulation of knowledge.

(1) Reasonableness: This criterion differs from fairness, as the latter has to do with nobleness and courtesy, whereas reasonableness is about a duty of the researcher to present the research results. Theory-oriented research normally is paid from taxes, so as a democratic principle the community must be able to take profit. And in case of a practice-oriented contract research there is a contractor who paid for it.

(2) Doing justice: Normally a researcher starts with studying what is already known about his subject matter. The reasons are not to invent the wheel, and to be able to formulate informative and steering research questions (Verschuren, in press, chapter 10). However, the researcher is supposed to refer to these authors in his report.

(3) Getting accepted the research and its results: One first concern of a researcher is to get the research proposal accepted by the financier or contractor. Next he has to get accepted the research results by the latter, as well as by other actual and potential users. For this it is important that the researcher is open about the research design (see below), about what he did during the research (logic in use, see below), and about the research findings.

(4) Right interpretation: For those who want to make use of the research findings, i.e. contractors, users and other researchers in the field, it is important that they rightly interpret the contents of the research report. For this they should know how the research was designed and executed, the decisions that were taken, as well as the strategies and methods that were used.

(5) Control of the researcher: The subject of control are the acts and decisions of the researcher during the preparation, execution and reporting of the research project. This control has two aspects: (a) Control by others, like the users/readers of the research report and other researchers in the field. (b) Self control of the researcher. As to the latter, once the researcher realizes that he has to be open about what he did and what he did not do during the preparation and execution of the research, he not only forces himself to make the right methodological decisions during the research as much as possible. It is also an incentive to behave truthfully, the second criterion of honesty. An important aspect of this is to prevent him from malversation, such as fraud and plagiarism.

(6) Accumulation of knowledge: Whenever other researchers or the researcher himself want to replicate the research, and or if they want to build on the results, they need to know all ins and outs of the research and its findings.

Openness about

A researcher in principle has to be open as to: (1) The research design, (2) his assumptions, viewpoints and expectations concerning the research issue, (3) the logic in use, (4) his own interests, (5) the research findings and (6) the theoretical sources he consulted.

(1) The research design: The design of a research has to be subdivided into a conceptual and a technical part. In the conceptual design the problem to be solved is made clear and translated into the research goal and the research questions. He also defines the main concepts in the research questions in order to make clear these questions and to downsize purposively the project. In the technical design the research strategy is chosen and specified, as well as the methods for data gathering and data analysis (Verschuren, in press, chapter 10). Roughly the conceptual and the technical design represent the contexts of discovery and of justification respectively.

(2) Assumptions, viewpoints and expectations: Every researcher has to assume several issues, for instance for being able to formulate informative and steering research questions (Verschuren in press, chapter 10). The users/readers not only should know these assumptions because these may in part determine the research findings. Besides this is important for understanding what the researcher actually did and the decisions he made. So the researcher has to make these assumptions explicit, and to present them in the research report. Mostly he also beforehand has ideas about the research object, as well as expectations about the answers

to the research questions. It is a good strategy to be open about these expectations in the research report, and then to see to what extend these are verified or falsified by the research, and to comment in the latter case.

(3) Logic in use: Mostly the research is not executed exactly as it was designed. The reasons are unexpected happenings and pitfalls, as well as wrong viewpoints, expectations and assumptions that the researcher had in advance. Most researchers feel embarrassed, and won't report things like these. Derksen, Korsten, and Bertrand (1988) who studied this phenomenon write: '…it appeared not to be simple to convince authors [the researchers they studied] that a fully open description of practical problems during the execution [of their research] would not be harmful for their image and that it neither would diminish their chances for [obtaining] future (contract) research' [my translation from Dutch; PV] (Derksen et al., 1988, p. 15). Instead of reporting their logic in use, i.e. the way the researcher actually executed the research, including misconceptions, mistakes and wrong tracks that initially were followed, they tend to hide away these and report how the research ideally was executed, the reconstructed logic. However, instead of feeling ashamed the researcher should see these 'failures' as insight in progress. Before the start they had good reasons to do things as they did, and they only can talk about failures grace to increased insight. Moreover, the logic in use is important for the user/reader for being able to rightly interpret and value the research findings. And finally it is also important for other researchers, so that they can learn from each other. For more information see Verschuren (in press, chapter 2).

(4) Own interests: The researcher may, consciously or unconsciously, have personal interests in the research. He certainly should not be open about this towards the respondents and the observed, i.e. the research units, before and during the research. The reason is that this may influence their answers (respondents) and or their behavior (observed), thus causing invalid data. But openness towards financiers and contractors before the research starts may be at stake. The latter must be able to take this information into consideration, and to balance the revenues against the risks they take. Also afterwards when the research is finished, the researcher better is open about his interests by putting this information in the research report. This is to be preferred compared to a situation that the researcher tries to hide away this information, whilst later on it becomes apparent. In that case the readers/users might feel cheated.

(5) Research findings: It is a matter of reasonableness that the researcher is fully open as to the research findings. But what about intermediate findings halfway the project? Openness at this point may counteract truthfulness in the sense of truth finding, as these findings may influence the respondents and or the observed. And should the researcher also be open as to findings that he was not looking for, i.e. that are a byproduct? And is he obliged to be open about what he learned from a methodological point of view? As to the last two questions there are no predetermined answers. It depends on careful consideration of the situation at hand and balancing advantages and disadvantages.

(6) Theoretical sources: The researcher must always be clear about the theoretical sources he consulted. If he fails to do so, this is an instance of plagiarism. For more information over the concept of openness and the role it plays in research methodology see Verschuren, in press, chapter 2. In sum this overview makes clear that the question whether the researcher should be open or not very much depends the answer to the questions why, about what, to whom, and when the openness is to take place.

Truthfulness

For the researcher to be open is an important part of honesty. However, as we saw this is not enough. To be open about whatever the researcher does or did, does not give any guarantee for his honesty. He should also be truthful, that is adhering to the facts. This has two aspects: (a) A strive for valid knowledge of reality, without distorting or contaminating it. (b) Reporting exactly what was found, no less, no more. In section 1 I labeled these as truth finding and truth speaking respectively. Another more current and less controversy labeling is veracity and frankness.

(a) Veracity: As said the researcher's attitude must be one of truth finding. However, truth is an aggravating concept. It is practically discarded in present day science, as the concept is difficult to define. What is that, truth? Is there just one single truth, or are there more truisms? How do/can we know what is true? Who decides what is true? Et cetera. For that reason scholars replaced truth by the concept of validity, defined as 'correspondence with reality'. Unfortunately this in large part shifts the problem, because new questions arise: What is reality exactly? Whose reality? Who decides what is real, or is a matter of fact? The best way to counter this problem is to define validity operationally as the absence of distortion. There are numerous well known and methodologically extensively documented types of distortion, both from the researcher himself and from respondents and observed. As to the researcher, he

can make errors such as selective and distorted perception, tunnel view, biased viewpoint and going native. And respondents and observed make mistakes such as interviewer bias, social desirability, strategic behavior, response set et cetera. So, part of veracity is the tendency and the capacity of a researcher to avoid, eliminate, reduce or repair these distortions.

However, this insufficiently covers the criterion of veracity. If it were sufficient there would be no need for the concept of truthfulness, and we could stick to the traditional criterion of validity. Firstly the biases mentioned all regard the context of justification (as opposed to the context of discovery; see below). This domain is about the question *how* the researcher is doing the research, as is elaborated in the technical design. And within this domain the biases mentioned only regard the measurement and observation process for which there is a lot of sound methodological regulation. Besides, a researcher has to make decisions and choices that are not bound to methodological procedures, rules and criteria, i.e. so called 'free decisions'. Examples are the choice of a theoretical framework, of definitions of the main concepts in the research questions, the way the researcher downsizes the project, the choice of assumptions that he makes, et cetera. Here decisions and choices much more depend on the person of the researcher, which stresses the importance of his veracity.

The same goes for the context of discovery, with its main question of *what* the researcher is studying. Roughly this regards the goal of the research and the research questions to be answered, i.e. the conceptual design of the research. Many decisions and choices to be made here also are or should be the subject of veracity. For instance, the researcher must not only avoid that he is influenced by his own interests, by his fixed ideas about the research object, and by the interests and/or fixed ideas of stakeholders of the research. Besides he must be accessible for relevant input; the concept of openness *for* information. By allowing some types of information and resisting others, the researcher is able to distort a right view of the object of research. This contradicts the well known methodological criterion of researcher independency. The acting of the researcher should be independent of himself as a person and of others, i.e. respondents, financiers, contractors, users, or other stakeholders, as well as other researchers in the field, who might influence him. As a consequence he must be open to all relevant information.

(b) Frankness: Truthfulness of the researcher is not only a matter of truth *finding* or veracity. He also must be truthful in how he communicates about both the way he executes the research and what he finds, the case of truth *speaking*. This communication should be frankly, without

distorting the information, without hiding something away and without adding something. He also should frankly report his doubts if there are any. And especially he should be open as to the logic in use. Synonyms for frankness that also represent the aspect of honesty that is envisaged here are open-heartedness, uprightness and integrity. It stands to reason that openness is or should be part of frankness: no frankness without openness. However, the reverse is not true, as one can be open without being frank or open-hearted.

Fairness

Fairness is about taking into account what others, i.e. target groups and the world we live in, deserve. As revealed in the first three sections openness and truthfulness are deserved (or should be deserved) by target groups. So lack of openness and truthfulness means a lack of fairness anyway. However, besides these so called errors of omission there may be also errors of commission as to fairness; the researcher may act to the detrimental of others. From this it follows that he must respect their integrity, not distorting, undermining, victimizing, affecting or violating them, and must act in their spirit. The errors of omission as to fairness follow directly from sections 2 and 3. In the present section we will concentrate on the active component of fairness, to be elaborated for each of the five target groups mentioned before. For practical reasons we concentrate on the main issues, as examples of what fairness of the researcher may mean. Before starting the reader must realize that most of what will be said about users/readers in point 2 here after, also counts for financiers and contractors.

(1) Financiers and contractors: Fairness in the sense of respecting the concerns of the latter especially is at stake in the conceptual design of the research, i.e. analyzing and defining the problem to be solved, and translating it into research questions. As to the first, the researcher should be straightforward in carrying out a problem analysis resulting in an adequate definition of the problem to be solved. Paradoxically enough this may mean that the researcher does not follow the financier's or contractor's demands. This despite the fact that this can bring him easily into a dilemma: not following the financier or contractor may mean loss of finances for the research project. The reasons for straightforwardness are that misconceptions of financiers and contractors as to the problem to be solved are very normal, and that problem analysis asks for sound methodological skills (Rouwette & Franco, 2015; Vennix & Rouwette, 2009; Verschuren, in press, chapter 13).

Partly because of ignorance, partly as a consequence of the dilemma above, and partly as an instance of false fairness, many researchers as a rule follow the financier or contractor. For

instance, in an article on this topic Raaijmakers (2009) writes: '… there will be no insurmountable disagreements between contractor and researcher, for the simple reason that mostly the researcher will conform to the frame of reference of the contractor' [my translation from the Dutch; PV] (Raaijmakers, 2009, p.169). However, as is demonstrated, honesty of the researcher asks for his critical attitude.

(2) Users/readers of the results: Here fairness regards primarily the research results. These results, or simply reading the research report, should not embarrass the users/readers. Or, at least, they should be warned when reading might be embarrassing. Fairness to the users also is a matter of accessibility of the research results. This is especially the case with most research at universities, which in large part is paid from taxes. So reasonableness asks for free access to the results. This is exactly what Merton (1942) meant with his criterion of communalism (Merton, 1973, see the epilogue here after). This idea may explain an explosion of open access journals in the last few years.

(3) The research units, i.e. respondents and observed: Fairness of the researcher here first of all means that he openly tells them beforehand what kind of data he is looking for, and how he is going to find, gather or produce these data. For instance, in an experiment or random clinical trial (RCT) the test persons should know in advance what the object of research is, and whether they will be in the experimental or in the control group. This is an instance of the well known criterion of informed consent. In addition, respondents and observed should know whether the results can be harmful or can be used against them.

(4) Other researchers: Firstly fairness towards other researchers means that they not only must be able to replicate the research for testing purposes. They must also have an opportunity to build on these findings. Secondly fairness means that they as much as possible must be hold back from making the same mistakes or from following the same unfruitful tracks as the researcher initially might have done. This demand in large part comes down to openness about the logic in use of a project.

(5) Authors who were consulted: In modern society knowledge and insight is regarded to be owned by the producers. So borrowing their ideas without referring to their names and publications is regarded as theft, and is labeled as plagiarism.

Epilogue

When Merton in 1942 formulated his CUDOS norms these were limited to four criteria to be fulfilled by scholars and scientific researchers: communalism, universalism, disinterestedness and organized skepticism (Merton, 1973). With communalism he meant that the results of science must be regarded as a collective good, so in principle they must be openly accessible for everybody. And the norm of universalism says that the work of scientists must be evaluated equally, irrespective of their religion, race or ethnicity.

Since the eighties of the last century science gradually became more commercial, which may have inspired Habermas to add one criterion: honesty of the researcher (Habermas, 1990). So he opted for the CUDOSH norms, with the H of honesty. However, our analysis makes clear that this addition is less complementing than it seems at first sight. Two out of Merton's four criteria appear to partly cover the concept of honesty. These are communalism and disinterestedness, the first and third of the CUDOS norms. Merton's communalism appears to be the equivalent of openness about the research findings. And his claim of disinterestedness of the researcher turns out to be one of the preconditions of veracity. Without disinterestedness truth finding is difficult if not impossible.

These overlaps do not take away that Habermas' merit is that he was the first to put the issue of honesty of scholars and researchers in the front light. We now know that there are not only humanitarian but also methodological arguments for it. Honesty is all the more methodologically crucial as a researcher in general has many opportunities and seductions for forgetting to be open, truthful or fair, wittingly or not. Tragically enough one can even say that the more methodologically qualified, the more opportunities a researcher has to do so without being detected. From this it follows that we must leave behind a widely adhered and misguiding truism that for adequate and fruitful research we just need a skillful researcher. He also must be open, truthful and fair.

This conclusion gives me an opportunity to refer to my highly recognized colleague Jac Vennix. For many years we worked together on research methodology, talking about fundamental methodological issues. It revealed a common basic view on science and scientific research. I'm sure he will appreciate my final conclusion above. This idea is further supported by the fact that in all those years I have got to know Jac as an open, truthful and fair person.

References

Habermas, J. (1990). *Moral Consciousness and Communicative Action.* Cambridge, Polity.

Derksen, W., Korsten A.F.A., & Bertrand, A.F.M. (Eds.). (1988). *De praktijk van onderzoek. Problemen bij onderzoek van politiek, bestuur en beleid.* Groningen: Wolters-Noordhof.

Merton, R.K. (1942). The Normative Structure of Science In: Merton, R.K. (1973). *The Sociology of Science: Theoretical and Empirical Investigations* Chicago, Il: University of Chicago Press.

Raaijmakers, S. (2009). Van een probleem een probleem maken. Methodologische reflecties over probleemanalyse. In: Bleijenbergh, I., Korzilius, H., & Vennix, J. (Eds.), (2009). *Voer voor methodologen. Een liber amicorum voor Piet Verschuren*. Den Haag: Lemma.

Rouwette, E., & Franco, L.A. (2015). *Messy problems: Practical interventions for working through complexity, uncertainty and conflict.* Nijmegen, Radboud University.

Vennix, J., & Rouwette, E. (2009). Methodologie van praktijkgericht onderzoek: de 'vergeten' praktijksituatie. In: Bleijenbergh, I., Korzilius, H., & Vennix, J. (Eds.),. *Voer voor methodologen. Een liber amicorum voor Piet Verschuren*. Den Haag: Lemma.

Verschuren, P. (in press). *Kernthema's in de Methodologie. Op weg naar beter onderzoek.* Amsterdam: Boom.