

Design and Normative Claims in Organization Studies: A Methodological Proposal

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Abstract This paper focuses on the pivotal role of Design Claims in scientific research. In fact, Design Claims link the adoption and/or use of a specific artifact (for example, a procedure, or a belief) to measurable and relevant effects. By doing so, Design Claims continuously spot gaps in theory, and then force to scientific advancements. This paper suggests that the dramatic lack of Design Claims (and consequently of Normative Claims) in Organization Studies not only results in lack of relevance, but also deprives our discipline of the beneficial epistemological interplay that should take place between design, normative and descriptive statements. This epistemological teamwork, where present, results in a “mirroring effect” that makes other fields of studies, such as Medicine, viable and relevant. Models and frameworks developed in Organization Studies, on the contrary, often result in epistemological dead ends: once emanated, their specific influence in the real world is rarely object of further specific interest. It is just as if Medicine scholars, after developing a theory on a certain health issue, were not interested in measuring how the adoption of that specific theory in the world of practice performed. Some methodological suggestions are then provided, to encourage a stronger presence of Design Claims in both qualitative and quantitative Organization Studies research.

Keywords Design claims • Normative claims • Artifact adoption • Epistemological status of organization studies

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1 Introduction

Let us compare the two following statements:

1. People should quit smoking.
2. Cancer risks rapidly decrease after quitting smoking.

The first statement is aimed at suggesting how the world ought to be, and the second is aimed at describing how the world is. In epistemological reflections [1], statements of the first type are often referred to as normative or prescriptive, and statements of the second type are referred to as descriptive.

Although a clear distinction between normative and descriptive claims is very important for scientific rigor, they are often two faces of the same cognitive medal. Common knowledge, in fact, easily unifies statements number 1 and 2 into the following: “Cancer risks rapidly decrease after quitting smoking, *then* people should quit smoking”.

After this simple example, we can say that even the more classical descriptive cause-effect claims, by their very nature, implicitly generate normative claims if:

- *The cause is buildable* (it is perceived as subject to choice or avoidance, to creation or destruction. For example: it is possible to quit smoking);
- *The effect is not neutral in comparison to the cause* (it is perceived as good or bad by a value judgement. For example: cancer prevention is good, even in comparison to the difficulties of quitting smoking).

Why does the scientific tradition keep normative and descriptive claims separated? Because, from a scientific point of view, nothing can be considered obvious, not even the goodness of cancer prevention. Thus, in the vast building of science, normative and descriptive claims are linked by claims that investigate the *goodness*, on the one side, and the *buildability*, on the other side, of the described situations. Value judgment research, in order to investigate goodness, and design oriented research, in order to investigate buildability, play a pivotal role in this framework (see Fig. 1). Ethical (but also aesthetic or ecological) claims, on the one side, and design claims, on the other side, can “fill the gaps” between descriptive and normative claims.

The example presented above, then, becomes:

1. Cancer risks rapidly decrease after quitting smoking (descriptive statement): *so, since*
2. people taking medicine A/following method B more probably succeed in quitting smoking, with costs and risks A’/B’ (design statement) *and*
3. diminishing cancer risks is more important than avoiding the unpleasant aspects of medicine A/method B (value judgment statement), *then*
4. people should quit smoking [by taking medicine A/by following method B] (normative statement).

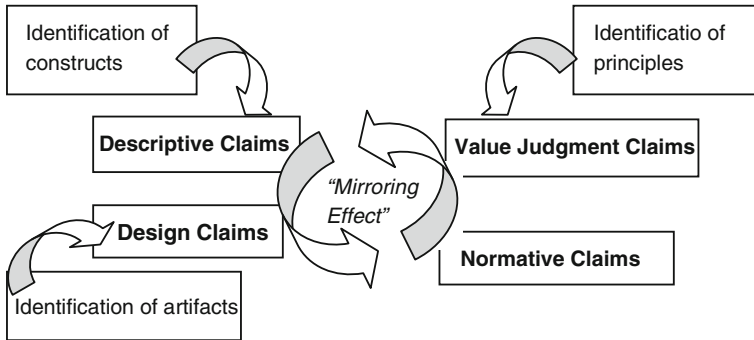


Fig. 1 The pivotal role of value judgment claims and of design claims between normative and descriptive claims

From an epistemological point of view, then, the distinction between normative and descriptive claims or statements is sound and clear. Attempts have been made to introduce a similar distinction between disciplines: according to this approach, there are descriptive disciplines or sciences, such as, for example, Physics or Biology, and normative disciplines or sciences, such as, for example, Architecture or Medicine. In this view, only normative disciplines are concerned with design (and value judgments). But, although authors supporting this idea are often very influential [2], I think that this view is epistemologically weak.

In fact, also the so-called “normative” disciplines develop descriptive claims, and also “descriptive” disciplines are engaged in design challenges: for example, an important stream of studies in Architecture is focused on the descriptive study of ancient construction patterns, whilst an important stream of studies in Physics is focused on the development of new-generation electric power stations.

Thus, I will not enter the debate about the “descriptive—versus—normative nature” of Organization Studies. I assume that our discipline, like all sciences, can host claims spanning from the former to the latter type. Moreover, as I will seek to demonstrate in the paragraphs below, I suggest that a more dynamic interaction between normative, design, value judgment and descriptive claims would be an important factor for scientific viability also for our discipline. Organization Studies, in fact, have been providing almost only descriptive claims so far [3].

In this theoretical paper, I will then concentrate on the possible role of Design Claims and Normative Claims in organization studies, from both an epistemological and a methodological point of view. I will refer to Medicine as a yardstick, since in this discipline the relationship between descriptive, design, value judgment and normative claims is well established, and rooted in a viable interaction between research and practice.

Research Questions:

- (a) *Could the disciplinary tradition of Medicine inspire Organization Studies as for the interplay between Design Claims and Descriptive Claims?*

- (b) *What are the main consequences of the lack of Design Claims in Organization Studies?*
- (c) *What innovations in research methods are needed to enhance the contribution of Design Claims in Organization Studies?*

2 Artifacts and Design Claims: Definitions

In Design Claims, the key subject is the *artifact*.

The definition of artifact adopted here is borrowed from ecological and evolutionary studies: artifacts are prostheses of human knowledge [4], i.e., they are tangible or intangible human creations thanks to which human knowledge travels and evolves outside the individual human body [5]. For example, a hammer treasures a great amount of competences on materials and on ergonomic issues; an oral poem, like the Iliad, treasures oceans of knowledge on human psychology. This definition includes both the cultural, intangible artifacts that social and psychological studies usually focus on, and the tangible, technological artifacts that are usually at the core of design oriented approaches.

Human life develops within complex networks of people, artifacts and natural elements. *Artificial systems* are identifiable clusters in such networks: for example, a village is an artificial system including citizens, norms, buildings, a local language, a river, a climate, etc. [6].

Organizations are artificial systems where people create and use many artifacts. A great deal of organizational knowledge is included or embedded in them [7]. Important artifacts for organizational life include, for example, archives, procedures, norms, best practice models, process management frameworks, myths, rituals, beliefs, reward mechanisms, hierarchical structures, contracts, communication protocols, or IT tools.

Artifacts are never the “perfect” outcomes of dedicated, rational design processes: since they are subject to selective pressure and to continuous, opportunistic, extemporary exploitations and modifications, they result from evolutionary dynamics as well. In other words, an artifact is a child of its designer, on the one side, and of the endless chain of its artificial ancestors, on the other side. Once born and separated from its designer, it will go on its own path, being modified, directly or indirectly, by users and by the interactions with the environment.

In-depth understanding of artifacts, then, is a challenging issue: classical, “mechanical” processes of classification and description are often not sufficient to effectively identify a specific “Artifact of type A”. A longitudinal, evolutionary understanding of the interactions between the ancestor artifacts, their designers and the (chain of) challenges they were confronted with throughout time is often necessary to understand the key features, the potentialities, the internal constraints of a class of artifacts.

Once identified, a class of artifacts can become the main character of those fruitful scientific claims, which were defined above as “Design Claims”.

Typical structures of Design Claims are the following:

- i. Under conditions Z, the adoption/use of artifact A is associated with the occurrence of phenomenon X, which in turn is associated with the occurrence of phenomenon Y.
- ii. Under conditions Z, the adoption/use of artifact A influences the relationship between phenomenon X and phenomenon Y.
- iii. Under conditions Z, phenomenon K influences the adoption/use of artifact A.

Adopting the well-known language of quantitative studies [8], we could say that:

- In case (i), phenomenon X mediates the relationship between the use of Artifact A and the outcome Y. An example of this kind of claim could be: “in a sample of US firms with more than 100 employees, the use of Artifact A (=a High Performance Work Practice model for HR) was found associated to diminished employee turnover and increased productivity, and then to increased financial performances” (elaborated from [9]).
- In case (ii), the use of Artifact A moderates the relationship between the predictor X and the outcome Y. An example of this kind of claim could be: “in a sample of manufacturing firms, the presence of Artifact A (=a strong organizational safety climate) was found associated to an attenuated relationship between job insecurity and accidents” (elaborated from [10]).
- In case (iii), the adoption/use of Artifact A is seen as the outcome of previous phenomena. An example of this kind of claim could be: “in companies adopting Artifact A (= Enterprise Resource Planning—ERP systems), mimetic pressures were found to have positively affected top management participation in Artifact A assimilation process, and top management participation, in turn, positively affected Artifact A usage within such companies” (elaborated from [11]).

3 The Pivotal Role of Design Claims in the Evolution of Scientific Research

The growing debate on Design Research, in which Information Systems studies play a pioneering role, stresses utility as the main goal of Design Research outcomes [12].

This insistence on utility probably stems from a reaction to the lack of relevance of many traditional Organization Studies outcomes, that our discipline must frankly admit [13]. Nevertheless, in this paragraph I will seek to demonstrate that not only are Design Claims potentially very useful for the world of practice, but they may also be powerful catalysts of innovative and non-trivial descriptive (and value judgment) research.

To do so, I will use a famous story, borrowed from the first book (originating from his doctoral thesis) of Louis-Ferdinand Céline [14].

3.1 Doctor Semmelweis and the Outrageous Wash-Your-Hands Procedure

In the first 1840s, there were two Obstetrical Clinics in the Vienna General Hospital. The two clinics admitted at alternate days, but the First Clinic had a bad reputation and women begged on their knees to be admitted to the Second Clinic. Many women even preferred to give birth in the streets if their delivery occurred in a day in which only the First Clinic admitted patients. A young Hungarian physician who worked at the First Clinic, Ignaz Semmelweis, focused on this problem. In the language of today's Organization Studies research, we could describe his first researches in the following way:

Puerperal fever researches: step 1

Research Outcome: Identification of a Normative Claim developed by users.

Research Method: Qualitative (interviews, participant observation).

“Women feel that it is better to give birth in the streets than in the First Clinic. They are really scared by the doctors of the First Clinic. They think that there is something wrong with the First Clinic: women die there.”

Semmelweis studied the records and he found that those women were tragically right.

Puerperal fever researches: step 2

Research Outcome: Identification of a Descriptive Claim. Research Method: Quantitative (statistical analysis).

“Puerperal fever mortality rates are 150 % higher in the First Clinic than in the Second Clinic. Mortality rates of the First Clinic are remarkably higher than those of street deliveries, too.”

Semmelweis was obsessed by the dilemma: what was wrong with the First Clinic? Some months after, a physician and friend of Semmelweis died few days after being accidentally injured by an autopsy tool during a post-mortem examination at the First Clinic. Semmelweis found that his friend's corpse displayed pathological features similar to those of puerperal fever. He then hypothesized that some “cadaverous particles” had caused both his friend's death, and the high mortality rates in the First Clinic. In fact, in the First Clinic, doctors used to perform obstetrical visits after performing autopsies, whilst in the Second Clinic women were visited and helped only by midwives, who were not engaged in autopsies. Semmelweis hypothesized that the invisible “cadaverous particles” could be removed by washing the doctors' hands with a chlorine solution, since this solution seemed capable to remove the “cadaverous smell”.

Puerperal fever researches: step 3

Research Outcome: Identification of a Design Claim, type (i). Research Method: Quantitative (experiment).

“The adoption of the experimental procedure (all doctors of the First Clinic now wash their hands with chlorine solution before obstetrical visits), made the hygienic conditions of the First Clinic similar to those of the Second Clinic, and consequently the First Clinic mortality rates immediately dropped to levels similar to those of the Second Clinic.”

A further statement obviously followed:

Puerperal fever researches: step 4

Research Outcome: Identification of a Value Judgment Claim. Research Method: Logical Deduction from Ethical Principles.

“Protecting women from the risks of puerperal fever is more important than avoiding the bother and the costs of washing hands with chlorine solution.”

And then:

Puerperal fever researches: step 5

Research Outcome: Identification of a Normative Claim. Research Method: Deduction from previous claims.

“In obstetrical clinics, doctors who perform autopsies should wash their hands with chlorine solution before obstetrical visits.”

But there was no theoretical explanation at that time for the hypothesis that doctors carried an invisible infection on their very skin or under their nails. So, since the idea that doctors were responsible for so many deaths was not pleasant, it was rejected. Semmelweis was dismissed from the Vienna hospital; after him, the procedure of washing hands was abandoned, and the mortality rates returned to tragic levels. He left Vienna and worked in two other hospitals, in Pest, where he instituted again chlorine washings, and obtained again impressive results. But the scientific community continued to reject his doctrine, which was weakened by the lack of an explanatory theoretical framework supporting it. Semmelweis started suffering from severe depression and died in a mental hospital, in 1865. The year after, Pasteur published the first of his major works: the germ theory of disease finally offered an in-depth explanatory description of the process against which Semmelweis had already found an effective solution.

Puerperal fever researches: step 6

Research Outcome: Identification of a Descriptive Claim. Research Method: Experiments.

“Living germs, invisible to the naked eye, cause infections if they are given the possibility to pass from infected to healthy bodies.”

Puerperal fever researches: step 7

Research Outcome: Identification of a Normative Claim. Research Method: deduction from previous experiments, surveys, and ethical judgments.

“All medical personnel should wash carefully their hands with solutions and methods that are proven effective in destroying germs, before each and every visit.”

3.2 Scientific Research as a Team Play

Doctor Semmelweis’s story exemplarily illustrates how Design Claims and Descriptive Claims desperately need each other.

Semmelweis’s Design Claim synthesized above in Step 3, although rejected by most Positivist members of the academic community of his times, raised fervent discussions on the basic concept of “contagion”, put the bases for abandoning some then-mainstream theories (whose application caused epidemics of puerperal fever), and created strong motivations to find a sound explanation to the “outrageous effectiveness” of chlorine washings. When Pasteur and Koch eventually published their theories, synthesized above in Step 6, they found a world that was eager to listen to them, also thanks to Semmelweis’s work. Many hospitals, thus, adopted the prescription synthesized in Step 7, and it was then possible to conduct precise large-scale surveys to soundly confirm the germ theory of disease.

I then suggest that the sole descriptive claims may be sufficient to keep a research stream viable only if they do not consider phenomena subject to value judgments (like, for example, in studies on the Big Bang).

In all the other cases, I suggest that science should be a team play, where Descriptive Claims, Design Claims, Value Judgement Claims and Normative Claims are players cooperating for the same final goal: they should all take to the field, they should all be given the possibility to play; they should keep themselves continuously aware of the position of their team-mates in the play field, and they should be willing to “pass the ball” of the research state-of-the-art from each other.

I also suggest that, in this team, Design Claims play a pivotal role. In fact, Design Claims are disrespectful mirrors that may suddenly force theories to know their own limits.

Here are some examples of how Design Claims can “pass the ball” to Descriptive research:

- How do you explain that I *can* build phenomenon Y by using an artifact A, even if this should be impossible according to your theory?
- How do you explain that I *cannot* build phenomenon Y, even if I used an artifact A under conditions Z, consistently with your theory?
- Look, I used artifact A (e.g., a normative claim, “wash your hands”), which is soundly consistent with your theory, and I could build phenomenon Y as predicted: your theory is corroborated.

The key point is *that scientific claims themselves are artifacts*.

So, it is possible to test their validity (their capability to “tell the truth”) by longitudinally studying the successes and failures of the subjects (e.g., organizations) purposefully adopting them. For example, if a company adopts procedures (normative statements) and/or beliefs (descriptive statements) which are consistent with a certain theory, and then the company experiences changes in its performances, it is possible to study this dynamic phenomenon as a quasi-experiment that corroborates/falsifies the involved theory. In a similar way, if an organization adopts an artifact that is not directly a scientific claim, but can be considered an expression or a consequence of it (for example, the company adopts a certain specific Information System consistent with a certain theory of Supply Chain Management), studies on the consequences of this adoption may result in interesting theoretical advancements.

Thus, this paper asserts that Design Claims are important not only for enhancing the relevance of the discipline to the world of practice, but also in order to enhance the rigor, viability and dynamism of its descriptive outcomes.

4 “Artifact Blindness” and Loss of the “Mirroring Effect”: Aspects of the Lack of Design Claims in Organization Studies

Many organizational changes are triggered by artifacts, when e.g., new models, or new rules, or new IT tools, or new communication styles are adopted. Nevertheless, the consequences of the adoption of a specific organizational artifact are rarely at the core of Organization Studies claims. Moreover, our discipline tends to dedicate different levels of attention to intangible organizational artifacts, on the one side, and to tangible organizational artifacts, on the other side.

4.1 “Tangible” Organizational Artifacts in Organization Studies

Organizational scholars often come from economics/social sciences backgrounds, and tend to be scarcely interested in the numerous tangible artifacts that shape organizational life, such as, for example, buildings, IT tools, or technological infrastructures. Artifacts of this type are often perceived as technological “givens”, out of the focus of social studies, and consequently they are almost never specifically described in Organization Studies.

For example, around the year 2000 many scholars were concerned by the fact that it seemed hard to establish a clear correlation between a generic construct “IT adoption” and organizational performances [15]. The specific characteristics of the IT artifacts in which investment had been made were not considered worth of

description [16]. If we looked at these research efforts with the eyes of Semmelweis, maybe we would feel uneasy.

Semmelweis would not be really interested in claiming “there is a relationship between the hospital’s hygiene and mortality rates performances”. *What* hygiene? The claim must be more specific. Doctors must wash their hands (which is more important, say, than washing the hospital’s floors), before every visit (and not, say, every evening) with chlorine solution and careful nail brushing (and not, say, with scented soap). In other words: *the artifact matters*. What specific artifact is adopted by an organization, under certain conditions, can make the difference. How can we investigate, for example, the relationship between IT adoption and organizational performance if we don’t understand “what specific IT” we are talking about? [16]

This “blindness” towards tangible artifacts in Organization Studies may be partially explained by the fear of losing disciplinary identity. In fact, the reasons why a certain tangible artifact works (or not) are often understandable with the help of another discipline only. For example, it is Computer Science that may explain some of the reasons why a certain IT artifact gives a competitive advantage. As a consequence, many Organization Science scholars prefer to protect their disciplinary identity and to avoid the inter-disciplinary contamination implied in artifact analysis. When a discipline is young and still not completely self-confident, such fears may influence the researchers’ choices.

We suggest that this “artifact blindness” hinders the healthy development of Design Claims, and then makes the “scientific team play” between different types of claims more difficult in our discipline. As a consequence, also the incisiveness and dynamism of Descriptive Claims is negatively affected.

4.2 “Intangible” Organizational Artifacts in Organization Studies

Intangible organizational artifacts, such as procedures, norms, beliefs, customs, policies, managerial models, institutional traditions etc., are of course more familiar to Organization Studies scholars [17] than the tangible/technological artifacts described in the paragraph above.

As a consequence, in this case there are not those inter-disciplinary difficulties that may hinder the creation of specific Design Claims when the artifact is tangible.

Nevertheless, proper Design Claims of the types described in Paragraph 1 (structure types i, ii and iii) are, again, quite rare. Even intangible artifacts tend to be considered as “givens”, and actively linking them to performances does not seem to be at the core of organizational scholars’ interests.

As a consequence, Descriptive Claims are much, much more frequent than Design Claims in our discipline. The typical statement in our discipline is, for example, “*inter-organizational trust influences negotiation processes and exchange performances*” (synthesized from [18]). Statements capable to complement such a descriptive general statement with a more specific, artifact-focused

claim, like “under conditions Z, the adoption of artifact A (e.g., a certain type of belief, a certain type of communication tool, a certain type of reward/punishment norm) can enhance inter-organizational trust, which in turn influences negotiation processes and exchange performances” are almost absent. It is just as if Semmelweis stopped at Step 2, just stating that being admitted at the First Clinic made the probabilities of deadly infections higher!

The negative consequences of this scarcity of Design Claims not only include the perceived relevance of the outcomes of our discipline, but also its scientific vivacity.

In fact, many intangible organizational artifacts, such as e.g., models, procedures, or beliefs, may be built or fine-tuned or made famous by scholarly research: if the scholarly community renounces to assess the performances resulting from the adoption of such models, procedures or beliefs, an important possibility of scientific advancement gets lost.

So far, few Organization Studies publications have been studying how the adoption of a theory-rooted belief, or model, or procedure influences organizational phenomena. Models and frameworks developed in Organization Studies often result in epistemological dead ends: once emanated, their specific influence in the real world is not object of further interest. It is just as if Medicine scholars, after developing a theory on a certain health issue, were not interested in measuring how the adoption of that specific theory and consequent health care protocol in the world of practice performed.

I then suggest that the lack of such “mirroring effect” provided by the interplay between Design and Descriptive Claims severely narrows our discipline’s potentialities.

5 Some Methodological Proposals for Design Claim Oriented Research in Organization Studies

5.1 Some Proposals for Quantitative Researches

Cross-sectional surveys (based on regression analysis) on samples of similar organizations are the most consolidated research method in Organization Studies.

But this kind of investigation may not be the ideal one to understand the effects of artifact adoption, and then it may be difficult to yield good Design Claims on the basis of this methodological approach. In fact, the process of artifact adoption and use develops throughout time along co-evolutionary paths, where previous constraints and context conditions play a key role. The “horizontal cut” provided by cross-sectional surveys may be scarcely effective in highlighting the vertical dimension of such a process. For example, in a famous paper Rafaeli and Sutton [19] focused on the consequences of the adoption of a new artifact in a chain of stores. The new artifact was a procedural norm for shop assistants: “always smile

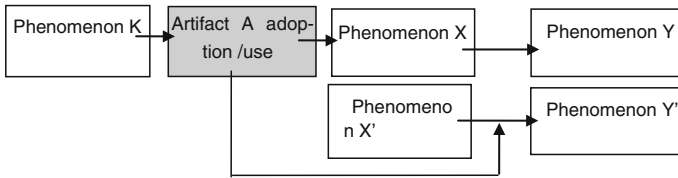


Fig. 2 Artifact adoption and use can be fruitfully considered as a mediator, as a moderator, as a predictor and as an outcome in quantitative hypotheses

and kindly answer to the customers' questions". Rafaeli and Sutton measured the level of compliance to this norm in several stores, and then compared the performances of stores where the compliance was higher (shop assistants smiled a lot) with the economic performances of stores where the compliance was lower. They were surprised to find that the performance was higher in shops where shop assistants smiled less. They concluded that the adoption of the "smile policy" negatively affected the performances.

But this conclusion appears weak to a design-claim educated eye. In fact, Rafaeli and Sutton just compared the "horizontal" performances of the different shops. They collected their measurements only once, and only after the adoption of the "smile policy". Should a shop have displayed an impressive improvement in its individual performances after the adoption of the policy, Rafaeli and Sutton could not have noticed it: data on previous years' performances were not even included in the list of Control Variables.

In a nutshell: *scholars adopting quantitative approaches and interested in Design Claims should take into consideration also alternative methods, different from traditional surveys. Longitudinal quasi-experiments, conducted by keeping under strict control the context conditions and the evolutionary development of artifact adoption and use, are probably a good option. The tradition of crossover studies for example, which has been soundly developed in Psychology and Medicine, could be a useful reference point.*

The framework synthetically representing the rich quantitative research fields opened by Design Claim Testing is provided in Fig. 2.

5.2 Some Proposals for Qualitative Researches

An important contribution to the building and fine-tuning of Design Claims (and consequently of Normative Claims) may come from Qualitative Research tradition, too. Qualitative studies, in fact, are already used to long-term, in-depth longitudinal studies; moreover, qualitative researchers' refined capabilities in extracting concepts from users and practitioners may provide the discipline with valuable tools to overcome the "artifact blindness" that affects our scholarly

community. In other words, most key steps to identify the constructs effectively describing organizational artifacts may come from qualitative studies.

On the other side, qualitative researchers usually come from a psycho-sociological background, and then they tend to be scarcely interested in artifacts, especially the tangible ones. Such scholars usually consider artifacts as “givens” and concentrate on nuances of social negotiations and emotional interactions. This scarce interest towards artifacts is very frequent even among researchers who are strongly oriented to participate in organizational innovation processes, such as Action Research oriented scholars [13]. Nevertheless, there is a growing awareness on the role of artifacts in social interactions: for example, the physical characteristics of the workplace, or the triggering effects of some specific Internet tools, are raising growing interest, so complementing the traditional customs of behaviorist social science [20].

In a nutshell: scholars adopting qualitative approaches should use the potentialities of their methods to concentrate also on understanding organizational artifacts as evolving human “prostheses”, which play a key role in organizational social interactions. A valuable contribution on the part of qualitative research would be, for example, the identification of the key artifact features perceived by artifact creators and/or users: this may allow to understand how organizational artifacts are granularly classified and defined by those who interact with them.

6 Conclusions, Limitations and Further Research

Design Claims were defined in this paper as scientific statements focusing on the antecedents and consequences of the adoption/use of specific artifacts. Artifacts were understood as prostheses of human knowledge, subject to evolution and to social dynamics within complex systems, such as organizations or competitive markets. Organizational artifacts may be both tangible (e.g., IT tools or TLC infrastructures) and intangible (e.g., procedures, norms, models, traditions). This paper took Medicine as a disciplinary yardstick and sought to demonstrate that a major presence of Design Claims in Organization Studies would enhance not only the relevance of our discipline to the world of practice, but also its scientific vivacity and rigor, thanks to the “mirroring effect” resulting from the interplay between Descriptive, Design and Normative Claims.

This paper also briefly focused on the fact that Design Claims put out novel methodological challenges both to qualitative and quantitative research traditions. In particular, cross-sectional surveys, which are the favourite research method of quantitative scholars, may be not optimal for investigating the longitudinal process of artifact adoption, that may rather require, for example, crossover approaches. The qualitative tradition of Action Research, on the other side, given its strong rooting in social sciences traditions, has been scarcely used to focus on artifacts so far. As a consequence, an enhanced role of Design Claims in our discipline calls for methodological innovations in Organization Studies.

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