

Chapter 1

Toward a Sociology of Traces



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What We Talk About When We Talk About Traces

The use of traces and footprints in social sciences can be seen at once as providing an imperfect, feet-of-clay foundation, or instead as omnipresent and inevitable, or even as a trailblazing approach. Indeed, addressing this topic may lead to a situation similar to “the classic stages of a theory’s career” ironically outlined by William James: it is first “attacked as absurd; then it is admitted to be true, but obvious and insignificant; finally it is seen to be so important that its adversaries claim that they themselves discovered it” (in Merton, 1968: 22). Ultimately, traces are a type of evidence. Related to a “family of terms such as ‘remains,’ ‘relics,’ ‘fragments,’ ‘traces,’ ‘vestiges,’ and ‘residues’” (Lucas, 2012: 12), these data represent a record of past activities and events we can no longer directly interact with. Haunted by arbitrariness (the entropy of what has reached us), absence (the potential significance of what has not reached us), impermanence (traces duration can well be ephemeral, also endangered by the very act of investigating them), and hesitancy (the original authors have no say in confirming or disproving such information), the notion of traces apparently points to a subpar and vicarious strategy. Actually, *the* quintessential strategy of archaeology and history, disciplines that turn to traces through force of circumstances, and not without lamentation:

Most human affairs happen without leaving vestiges or a record of any kind behind them. The past, having happened, has perished with only occasional traces. To begin with, although the absolute number of historical writings is staggering, only a small part of what happened in the past was ever observed (. . .). And only a part of what was observed in the past was remembered by those who observed it; only a part of what was remembered was recorded; and only a part of what was recorded has survived; only a part of what has survived

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has come to historians' attention; only a part of what has come to their attention is credible; only a part of what is creditable has been grasped; and only a part of what has been grasped can be expounded or narrated by the historian. (Gottschalk, 1950: 46)

Sure, paleontologist and historians can make a virtue out of necessity (see, e.g., Muir, 1991; Zemon Davis, 2010: 5–6; Peltonen, 2012; Bassi, 2016), but the commonsensical assumption is that immediate observation and interrogation of phenomena in their entirety are preferable—time travel would be more effective.¹ However, the recourse to traces is getting more frequent not only for studying the human past, which we are forced to access through the small and dilapidated gate of its remnants, but also for making sense of our contemporaneity, which could be observed firsthand and freely questioned.² The list of disciplines varies, also in terms of the specific meaning attributed to traces, and includes, unsurprisingly, semiotics (Eco & Sebeok, 1983; Galinon-Méléneć, 2016; Olteanu et al., 2019) and forensics (Wiltshire, 2019; Servida & Casey, 2019; Burnier & Massonnet, 2020), but also anthropology (Napolitano, 2015; Dragojlovic & Samuels, 2021), philosophy (Heil, 1978; MacDonald, 1991; Bouton, 2020), sociology (Gómez-Barris & Gray, 2010; Heiskala, 2021), psychology and neuroscience (De Brigard, 2014), literary criticism (Orgel, 2015), digital humanities (Bardiot, 2021), evaluation studies (Brahim & Lotfi, 2020), and urbanism (Johung & Sen, 2013).³ This stunning variety also elevates the risk of conflating traces with other kind of information, and then it is but a small step to an all-encompassing view that would see traces everywhere: a dynamic reminiscent of the so-called “law of the instrument” or “Maslow’s hammer.”

¹Analogous arguments induced Lazarsfeld (1950) to spell out our obligations to future historians, who might reproach us for not having given enough thought to what they will want to know about our epoch. Similarly, time capsule initiatives are intended to preserve fragments of our culture for posterity purposes, sealing deliberately certain items and scheduling their future retrieval (Jarvis, 2003). Not to mention technical issues, the cultural/hermeneutical problem is still there: “today the contents of time capsule x are unremarkable because they are commonplace; in three thousand years, x might vaguely suggest the gestalt of a vanished civilization, although precisely what this might mean is unclear; in deep time, however, the contents of time capsule x—assuming they survive relatively intact—would almost certainly require another Champollion or Ventris to decipher what, thousands of years previously, were its commonplace and transparently meaningful artifacts and signs” (Matuozzi, 2004: 242; see also Zerubavel, 2003, and Ferraris, 2012).

²This is a simplification. As a matter of fact, the problem of gathering empirical evidence of otherwise unobservable phenomena is not more pressing for analysts of no-longer-existing subjects than it is for analysts of still-existing ones: nowadays contemporary (say) populism, colorblind discrimination, or social mindscapes are (almost) as directly unobservable as ancient Egypt civilization or Renaissance cities.

³So-called hard sciences are not unaffected by the concept of trace either. In analytical chemistry, “trace analysis” designates the determination of very small amounts of elements and compounds present as admixtures in the major components of the sample under examination (see Hulanicki, 2016). Perhaps more pertinently, it should be noted that medicine (diagnostic procedures and symptomatology in particular) has always relied on traces in the process of determining pathological conditions: “the model of medical semiotics that makes it possible to diagnose diseases not recognizable through a direct observation and is based on superficial symptoms sometimes irrelevant to the layman” (Ginzburg, 1979: 280). In this sense, it has also been argued (Pape, 2008) that traces do connect sciences and humanities.

After all, the following three questions examined by Tilly actually apply to any form of scientific research: “how does the phenomenon under investigation leave traces? How can analysts elicit or observe those traces? Using those traces, how can analysts reconstruct specified elements, causes, or effects of the phenomenon?” (Tilly, 2002: 252). Indeed, there is hardly any evidence which has not been considered, at one time or another, as the trace of something else one would like to explain.⁴

The last sentence is distinctively Lazarsfeldian, pinpointing a problem, however, characteristic of any empirical science: how to establish a connection between a series of observations and a more fundamental state of affairs/property (the actual main focus of interest) that has given rise to those indicators (see Lazarsfeld, 1958; see also Swedberg, 2018)—“and this is also what men have tried to do over the centuries when they have asked their sweethearts: ‘Do you *really* love me?’” (Lazarsfeld, 1953: 352). Although his terminology often evokes parallels with traces (he talks indifferently of “indicators,” “symptoms,” “clues,” and “signs”), Lazarsfeld stoutly championed a statistical “model of convergence” (see Fasanella, 2022): the higher number of data sets which go in the same direction and the greater the correspondence among those data, the more confidently scholars can consider their interpretations reliable and trustworthy. Traces, though, suggest a different orientation toward data (and their relation to the underlying “quality” they can be traced back to). Historiography, trace-based discipline par excellence, might come to the aid of those who would like to grasp the peculiar payoff of heuristic strategies based on traces interpretation. The tenth (and last) of what Arnaldo Momigliano defined “the rules of the game in the study of ancient history” reads:

The historian is not an interpreter of sources, even in the very act of interpreting them. He is, rather, an interpreter of that reality of which his sources are telling signs or fragments. The historian encounters an author in a text, and in a decree he perceives the legislative body that issued it under specific circumstances; inside an ancient house, he finds the person who inhabited it, and in a tomb he finds the beliefs of the group to which the deceased belonged. The historian interprets his documents as traces of individuals who have vanished. He finds the meaning of a text or object in front of him because he understands how it belonged in that situation of which it was a product and part. The historian transfers what survives to a world that is no longer present. What ultimately makes a historian is the ability to read the document as if it were not a document, but an actual event of past life. (Momigliano, 2016 [1974]: 45)

Typical of interpretations of traces is the spirit of Peircean abduction (see Timmermans & Tavory, 2012; Atkinson, 2018): the use of conjectural inferences to explain some enigmatic experience by linking specific materials with theoretical generalizations via hypothesis construction (see also Misak, 2013: 47–50). Most importantly, far from taking data at face value, researchers confronted with traces are pushed to go (even wildly) beyond their surface and apparent meaning (this is Momigliano’s lesson). A trace in itself is neither precious nor worthless but, almost

⁴It holds true for social phenomena in general what judge Giovanni Falcone said about Sicilian Mafia in particular: “everything is a message, everything is full of meaning in the world of Cosa Nostra, no detail is too small to be overlooked” (in Stille, 1995: 6).

tautologically, appraisable only for what it can be traced back to—turning data into substantial interpretations, traces might constitute “strategic research materials” (Merton, 1987).⁵ Excellent theories can do almost everything, granted. But why are traces supposed to enable this abductive theoretical surplus? It is not just that they are essentially more informative than standard evidence; if footprint-like clues are insightful, it is because they are often left without awareness. A key point of trace-like evidence is that they are *evidence that did not expect to possess evidential character*: actually, they are seen as evidence only from the perspective of the analyst, while those who produced the trace did not envisage its potential. In this sense, traces are informative not only because they did not intend to inform anyone, but mostly because they were usually unintended in the first place (actually, intentionality might have changed them or made them faded out⁶). Allowing “unauthorized inference” (Gibbs, 1999: 115) to take place, traces convey intelligence and insight not only about elements unbeknownst to their producers but also about aspects they might rather not want to declare altogether (see Sabetta, 2020)—and this is what makes them useful also for studying current phenomena and actors who have not yet vanished.

The idea of appreciating the involuntary component of traces (conceiving them primarily as clues rather than statements), bracketing off the overt intentionality in their production in order to get at something more profound, is what lies behind Ginzburg’s evidential paradigm, a method of interpretation that recurs throughout many chapters included in this volume. Ginzburg’s approach is too famous to need to be scrupulously repeated here, but the core of his method is more than pertinent to our concerns, based as it is precisely on traces, “on debris, on marginal data, considered as detectors. This way, details usually considered unimportant or even trivial, ‘low’, could provide the key for understanding the highest product of human spirit” (Ginzburg, 1979: 280). If these kinds of data seem trivial and marginal is because they were so, originally, to their producers/authors (actually, it may be assumed that they were not even recognized as potential information or data). But seemingly marginal matters can be transmuted into fundamental theoretical matters and, actually, as Merton put it (1987: 16–19), the “trivial” is a prime example of strategic research materials: there is no necessary relation between the socially ascribed significance of empirical data under examination and their significance for analytical purposes—“the scientific and the human significance of those materials can be (. . .) poles apart” (Merton, 1987: 18). Therefore, traces allow researchers

⁵This approach is altogether different from the idea that information should be tackled in their totality ($N = \text{all}$) or statistically representative fractions thereof (random sample) because they are envisioned as formally equivalent, interchangeable, and one piece of evidence is as good as any (see Fasanella and Sabetta 2022: 122–123).

⁶Animals, too, are obviously capable of throwing their predators off the scent by covering their own tracks and footsteps—but they can do even better: for example, Australian magpies outsmarted ornithologists by purposefully removing GPS trackers placed on them for studying their movements [see Crampton et al. (2022)].

to probe and go beyond the accounts that collective and individual actors offer of themselves:

At least three fourths of the lives of the saints of the high Middle Ages can teach us nothing concrete about those pious personages whose careers they pretend to describe. If, on the other hand, we consult them as to the way of life or thought peculiar to the epoch in which they were written (all things which the biographer of the saint had not the least intention of revealing), we shall find them invaluable. Despite our inevitable subordination to the past, we have freed ourselves at least to the extent that, eternally condemned to know only by means of its “tracks”, we are nevertheless successful in knowing far more of the past than the past itself had thought good to tell us. Properly speaking, it is a glorious victory of mind over its material. (Bloch, 1992[1954]: 52–53)

It is through the interpretation of the analyst that a trace speaks, not through the intention of its original protagonist; indeed, as Bloch put it (1992[1954]: 61), one reads a trace in spite of what its producer intended.⁷ And this perspective does not get less rewarding when applied to modern-day phenomena: “even in the present, who among us would not prefer to get hold of a few secret chancellery papers or some confidential military reports, to having all the newspapers of 1938 or 1939?” (Bloch, 1992[1954]: 62. See also Ginzburg, 2017).

True, False, Fictive

Traces are not less or more subject to inaccuracy or unreliability than any other kind of evidence. Indeed, they open a threefold understanding of social reality, connected to the triad of what is “true, false, and fictive”—here we are quoting the subtitle of an essay collection by Ginzburg (2012), titled indeed *Threads and Traces*. We have (–) truthful, genuine traces that allow reliable inference; (–) fallacious, invalid traces that bring about false results; and (–) deliberately misleading traces that seem to be authentic but are actually not, plausible but deceptive traces left behind on purpose. Arguably, the latter are the trickiest ones: the false that advertises itself as true. How to work out the fine (and crucial) line between what’s false and what’s fictive?⁸

⁷The tension between subjectivism and objectivism in social science is long-lasting and venerable and cannot be thought through thoroughly here. However, it should be observed that even dealing with artifacts intentionalism is not the only interpretative option: interestingly enough, criticizing rigidly intentionalist explanations of material culture, Eaton notes that “makers are not infallible guides to the functions of artifacts they themselves have made (...) Sometimes artifacts’ first functions are not even anticipated or endorsed by their makers. (...) In the case of hermeneutically complex artifacts—like artworks—the maker may not even be the best interpreter of the artifact; in some cases, she may not even understand it. Indeed, artists are notoriously poor interpreters of their own work. The fact that the maker’s intention is often a reliable indicator to an artifact’s function (...) does not mean that intentions are constitutive of function” (2020: 41).

⁸Of course, this affects not only the topic of what has been (hopefully true, real facts and events) or what might have been (possible, different alternatives), that is, the retrospective dimension of “what

Erasing one's own tracks and producing false ones: the ability to "pretend to pretend, which implies the calculation of a subject in relation to another subject able to calculate" (Eidelsztein, 2018: 105) is distinctively human. And so is the reaction to the realization of having been examined: previously inadvertent traces can well become deliberately occasioned once their producers perceive their informative potential—individuals might then communicate intentionally what will appear unintentionally transpired (see Lombardo & Sabetta, 2021).

Data are at the core of definitions of contemporary society. Van Dijck et al. (2018: 9), for instance, when defining the *platform society*, highlight that platforms constitute a global online ecosystem "that is driven by algorithms and fueled by data." *Datafication* processes (Mayer-Schoenberger & Cukier, 2013) can be defined as the ability to translate into data several aspects of the world (and of people's lives) that were never quantified before. Currently, personal behavior, business processes, cities, private lives (Mulligan, 2014), and even beauty (Elias & Gill, 2018) are being quantified. What emerges from datafication and "self-tracking cultures," which have been deeply transformed and enhanced by digitization processes, is a *quantified self* (Lupton, 2016). "Personal digital data" are generated continuously, and they are "fundamentally about the lives of humans" (Lupton, 2016: 5): indeed, "they have begun to play a significant role in influencing people's behaviors, sense of self, social relationships and, increasingly, their life chances and opportunities" (ivi).

An important share of personal digital data can be considered as traces, inadvertently left by users as they interact with digital tools and services (ranging from search engines to social media platforms, from smartphones to wearable devices). Through the datafication, commodification, and selection processes performed by online platforms (Van Dijck et al., 2018), these inadvertent behaviors retroact on user (and usage) online experiences, as platforms select the most relevant content or services to offer, creating *personalized* experiences.

Scholars have framed such ecosystems in terms of a "black box society" (Pasquale, 2015), since platforms generally operate through ways that appear opaque to most of their users (Gillespie, 2014) and only partially known to the general public. While most users are unaware of the specific algorithmic mechanics that regulate social media platforms, search engines, and other digital tools and services, there is also a growing development of "algorithmic imaginaries," which are ways "in which people imagine, perceive and experience algorithms" (Bucher, 2017). Indeed, digital media users create mental models of how algorithms operate, and some of them rearrange their behaviors and interactions accordingly. In Bucher's research, for instance, some Facebook users have reported their efforts to "train" the algorithm, in order to get more suitable information on their social media feeds, while other referred to have modified their posting behaviors to better suit the algorithms, thereby gaining more visibility on the platform (Bucher, 2017). Indeed,

has been left behind." It also affects the predictive dimension of traces, the use of trace-like information to forecast and make predictions.

users show a growing tendency to mention (their understanding of) algorithms, when addressing digital tools and services usage, expressing their evaluation over their mechanisms, and sometimes expressing a playful attitude toward the exploration of these dynamics, including intentionally changing their activities in order to tame the algorithm and unlock a better online experience (for an exploration of algorithmic imaginaries, as emerged among dating app users, see Parisi & Comunello, 2020).

A large share of personal digital data can be considered as truthful, genuine traces, which are left inadvertently by users. Even in those cases, nevertheless, platform affordances and imagined affordances (Nagy & Neff, 2015) enable specific behavioral strategies and tactics, encouraging some behaviors while discouraging (or constraining) others. Users figure out the appropriate behaviors that should be performed on each digital platform by negotiating with affordances and by collectively developing socio-cultural usage norms that tend to be platform-specific, generating so-called media ideologies (Gershon, 2010). This understanding of the appropriate manner of acting on digital platforms emerges at the intersection between platform affordances and socio-cultural considerations, and it tends to vary over time as well as across different social groups, with strong differences emerging, for instance, between different generations, but also at an individual level (Fernández-Ardèvol et al., 2020).

Therefore, we need to question the very notion of “truthful and genuine” traces, if the aim is translating the meaning of traces into different environments (including the offline world). Furthermore, as illustrated by the aforementioned users’ experimentations in exploring and training the algorithms, personal digital data can also constitute deliberately misleading traces, aiming at retroacting of platform’s mechanics themselves and on the overall platform usage experience.

Platform Society and Its Footprints: What People Leave Behind in the Digital Age

There is something essential to online platforms that activates the production of “data that did not require a special effort to collect, [being] the digital by-product of the routine operations of a large capitalist institution” (Savage & Burrows, 2007: 887). As van Dijck, Poell, and de Waal point out, the datafication process is closely intertwined with *commodification*, as platforms are constantly engaged in processes that transform the collected data into economic value. The global platform ecosystem is, indeed, “overwhelmingly corporate” (van Dijck et al., 2018: 4), while platforms are “formalized through ownership relationships and business models” (ibid.: 9). While a thorough analysis of the *corporate* nature of the contemporary online environment, and its dealing with data and traces, is out of the scope of this Introduction, it is worth mentioning that such a context has given birth to what has been defined as “surveillance capitalism” (Zuboff, 2019), an economic system which

deploys and commodifies human experience for extracting (information), predicting (behaviors), and selling/making profit.

In such a context, power relations are at the core of the struggles between users and digital artifacts and between citizen/consumers and corporations. Digital technologies, as cultural artifacts, can be considered as *battlefields*, where different social groups confront each other (Oudshoorn & Pinch, 2003). In the 1990s, Kline and Pinch highlighted the need to consider “the social structure and power relations within which technological development takes place” (1996: 767). Power is embedded in technological objects, while different social groups have different abilities “to shape the development of an artifact” (ivi), and they are, in turn, differently shaped by it. A similar mutual shaping approach can be observed with regard to algorithms and to the ways they deal with our digital traces: while it is true that “algorithms certainly do things to people, people also do things to algorithms. The social power of algorithms—particularly, in the context of machine learning—stems from the recursive ‘force-relations’ between people and algorithms” (Bucher, 2018, p. 42). Nevertheless, different social groups have different levels of agency and exert different power in these negotiation processes, by being, for instance, included or excluded in the design and technology definition, as well as in data gathering and elaboration processes, which tend to operate (paradoxically, if we consider the unprecedented amount of data circulating in contemporary societies) by following the representation of an “ideal user” which is far from being inclusive, in terms of gender, age, ethnicity, etc.

Early *cyberfeminists*, by focusing on digital technology’s production, development, and adoption, highlighted how technology was essentially designed by men and for men, as most digital artifacts produced an ideal user that was far from being neutral: it was, indeed, male (Haraway, 1985). More recent discussions about *ageism* in digital technology (considering both the design process and the symbolic level) highlighted how socio-cultural views and designers’ backgrounds converge, as digital technologies are generally thought of as addressing “young” people, consistent with the backgrounds and standpoints shared by computer scientists (Rosales & Svensson, 2021). These views tend to consider older people as “unexpected users” of digital tools and services (Rosales & Fernández-Ardèvol, 2020), based on (often hidden) assumptions and power dynamics.

This also seems to apply to the ways in which artificial intelligence systems and social media platforms algorithms deal with personal digital data. Critical algorithm studies (Gillespie, 2016; Kitchin, 2017), as well as journalistic accounts (Allen, 2016), have underlined the widespread of biases in such systems. Indeed, it is in the complex interactions between digital artifacts and socio-cultural considerations that such phenomena emerge. As highlighted by Airoidi (2021), for a better understanding of these dynamics, we need to focus on both “culture in the code” and “code in the culture,” as the mechanics of algorithmic systems are shaped not only by designers (and influenced by their standpoints) but also by the data with which these systems are fueled, data that are generally produced by users. As Noble points out, by focusing on search engines indexing and ranking criteria, “the algorithms used to produce the results of searches perpetuate the reinforcement of an oppressive

power towards people of color and women in particular, highlighting how racism and sexism have become, often unconsciously part of the language and technological infrastructure that we use every day” (2018: 1). Similarly, when addressing artificial intelligence, Chu et al. highlight that “predictive models in AI systems amplify inequity, privilege, and power in society” (2022). Following this perspective, Klinger and Svensson (2018) “deresponsibilize” algorithms as a computer construct, clarifying how their influence can be understood only if considered in the complex dialectical relationship between media logic, technology, and economy, which is needed to understand how algorithms work and how they impact on some representations of reality.

Consistently, we believe that digital traces, when consisting of personal digital data, should be observed from a multidimensional and mutual-shaping perspective, with emphasis on power relations. This, considering how traces generated by individual and collective online behaviors are enabled (and shaped) by the affordances and constraints of digital environments (which are in turn influenced by the complex dynamics of design, adoption and personal domestication) and also filtered by users’ negotiations with such affordances. Such approaches can also interpret how socio-technically situated traces retroact within digital systems, fueling algorithms and predictive models, thus reinforcing (or questioning) the systemic power relations.

Structure and Logic of the Volume

This volume contains a selection of the papers presented at the international conference “What People Leave Behind: Marks, Traces, Footprints and their Significance for Social Sciences,” held online on June 15–16, 2021, and hosted by the Department of Communication and Social Research at Sapienza-University of Rome.⁹ The initial set of research questions that drove us to organize this conference was heterogeneous, almost erratic (indeed, otherwise we would not put a conference together). How does Google predict flu peaks before public health authorities do? Why are these predictions wrong at times? How did Walmart link a spike in the sales of Pop-Tarts to hurricane forecasts? Why are people’s inadvertent little gestures more revealing of their authentic character than any formal posture they may carefully construct? How can a single piece of unintentional information be infinitely more informative than thousands of public records? What kind of data does Netflix use to profile its customers? What did Marc Bloch mean by *témoignages involontaires*? Considering that no systematic analysis exists regarding social traces

⁹Traces of this event can still be found on the Internet: <https://web.uniroma1.it/whatpeopleleavebehind/>. Vital (and economically generous) help was provided by the PhD Program in “Communication, Social Research, and Marketing” then coordinated by Antonio Fasanella: we are grateful and indebted.

and footprints, even basic points were open to discussion—what have to be considered traces and footprints main characteristics, as well as their epistemological significance, ontological status, and the use (or lack thereof) of these concepts in classical social theory. These questions, however, have been answered in different ways during the conference. Eventually, the debate came to center on four main lines of reasoning: the spatial and interactional dimension of traces, their modern algorithmic and social media-induced nature, the political stakes they carry and raise, and their methodological/epistemological implications. This volume is split accordingly across four parts.

Traces are inherently embedded into certain spatial configurations of our environment and tied to its partitioning, categorization, density, perception, and representation (basically, its complexity). Such spatial structures, of course, are not kept in an artificial void, but crowded by endless series of actions and reactions, resembling Bruegel's paintings rather than de Chirico's; this topologically enacted, relational, back-and-forth processual iteration greatly affects traces production, bearing upon both their display and their understanding. Part I (titled "Traces Between Space, Interaction, and Symbols") is composed of five essays that focus on this interplay of factors: significantly, all are empirical analyses, providing as many case studies (remarkably conceived, in four out of five cases, as cross-contextual examinations). Monier's chapter tries to puzzle out a peculiar kind of mark, the donor plaques exhibited by recipient institutions like museums for expressing appreciation to their (mostly financial) contributors. Instead of simply betokening innocent generosity and dispassionate philanthropy, these plates epitomize the result of a process of negotiation, documented by Monier through ethnography and interviews conducted in both Paris and NYC, symbolizing otherwise invisible power relations. The following chapter, authored by Townsend and Patsarika, also carries out a transnational comparison (between Greece and the USA) regarding the role played by traces, here intended as indexical forms of representation, in sensemaking processes performed within local communities. Special attention is given to researcher-participant interactions, public ethnography, and so-called cultural probes, in their shaping actors' experiences of design community projects: in these situations, traces are what give flesh (and social substance: history, identity, relations, desires, and struggles) to formal structures. In Chap. 4, Grenz and Robinson reconsider the debate on the epistemological dimension of traces and tracing confronting Western approaches with non-Western ones (Aboriginal "First Australians" in particular). Rather than opposing Indigenous and non-Indigenous perspectives, they demonstrate how traces imply different cultural notions of social binding, thus conceiving interpretative tracing as a cosmopolitical tool of analysis. Chapter 5 continues the emphasis on spatial and interactional features of traces, exploring the process of *avant la lettre* gentrification of a former neighborhood in Winston-Salem, North Carolina, and the displacement of its African American, working-class residents. Rose and Flynn guide the reader through the residues of what (and who) this process has left behind, identifying historical patterns of conflict and succession in urban areas: in this case, traces are also what avoid the complete cultural erasure of the black community. Symbols, interactions, and spaces of traces are also highlighted in the last chapter of the first part, in which Rosso puts into use

the physical and virtual footprints of museum visitors in four different settings (Buenos Aires, London, Paris, and NYC). Taking into account several dimensions (the experientiality of visits and their trajectories, visual performances, architectural organizations, online feeds), Rosso shows how selfies, hashtags, and gift shops have re-shaped the form of modern museums; such subsequent aftereffects are now actively triggered.

We already underscored that online communication, interactive technologies, and automated digital agents took the game to another level, basically unfolding a new “socio-technical order” (Law, 1990: 10; see also Airoidi, 2021) in which traces play an even more significant role. They are simply more ubiquitous, sought-after, and inspectable than it was in Internet-less societies. Part II, titled “Algorithms, Social Media, and Online Footprints,” specifically addresses this Internet-mediated system and its peculiarities in terms of traces. In the chapter that opens the section, Agostini, Gianturco, and Mechant mix offline ethnography, netnography, and interviews for delving into the microcosm of virtual communities. The trail of digital traces unintentionally left behind by groups of users is, at once, indispensable for making sense of the feeling of belonging that community members have and conducive to forms of mutual surveillance, peer-to-peer monitoring, and reciprocal adjustments; interestingly enough, as the authors claim, it would have been hard to spot many indicators of these dynamics without using qualitative methods.

Digital traces might also prove valuable in opening the black box of algorithmic culture: in Chap. 8, Amato and Aragona discuss four empirical cases that show how digital footprints can be used for exploring (i.e., auditing, testing, and parsing) algorithms’ models and outcomes. For example, the automatization of inequality and discrimination, both gender- and race-wise, is perfectly disguised and invisible at the surface level, becoming more perspicuous and comprehensible only through the study of side effects and by-product information. Algorithms, however, are personally interpreted and re-interpreted too, thanks to a process of individual meaning-making that impacts actors’ decisions of sharing (or refraining from doing so) sensitive data—this is the main focus of Casagrande’s contribution. Relying on data regarding young wannabe journalists, she distinguishes between intentionally disseminated and unintentionally exuded traces, underlining the entanglement of self-branding and self-tracking practices (i.e., how and why “digital self” and “quantified self” overlap). Part II ends with another analysis of the interaction between traces and algorithms: in Chap. 10, Garzonio dissects the European legal framework for AI, examining not only its strengths and weaknesses but also the current opposition of self-regulation *laissez faire* with more binding injunctions. Quite incisively, digital traces are considered as full-fledged means of production, whose consequentiality can be underappreciated by both people and legislators.

Legal conundrums, economic revenues, individual and collective agency, power differentials among actors and rectorors (see Reed, 2020), and gray areas of various sorts—the topic of this volume could hardly be more politically charged. If anything, stimulating interpretations at odds with actors’ intentional meanings, the analysis of social traces is often on a slippery slope. Part III, broadly titled “Traces and Political Sphere: Capitalism, Surveillance, Personal Rights, and Moral Concerns,” is intended to account for the numerous political ramifications of traces and footprints;

unsurprisingly, the majority of chapter here included tend to adopt a critical stance toward late capitalism. The opening chapter, authored by Borghini, Scalia, and Tafani, revolves around the typical predicament of “watching the watchers” and “guarding the guards.” Authors examine how the nexus of digital traces production relates to the issues transparency and surveillance, which are currently reinforcing each other on an arguably unprecedented scale. The case of WikiLeaks founder Julian Assange, and his mission for total transparency, aptly illustrates how surveillance cultures can cultivate new forms of power actually concealed; to expose these and pockets of secrecy, therefore, is consistent with emancipatory purposes of Enlightenment-inspired political principles. Another angle on political principles is provided by Chap. 12, which is devoted to clarify a momentous example of social traces, i.e., the impact of human (and carbon) footprints on the environmental crisis. Calderamo and Nocenzi put unsustainable traces at the center stage of climate change, key to understanding and then envisioning effective solutions for avoiding worst potential consequences; accordingly, they claim that traces should play a pivotal role in new sociological theories of sustainable development. In Chap. 13, Leone, Licata, Mastropietro, Migliorisi, and Sessa present yet another distinctive frame of traces’ political relevance: the colonial legacy of European imperialism, with special attention to fascist colonial policy in East Africa. Bringing this debate (far less widespread in Italy than abroad) to a more sophisticated level, the authors argue that previously marginalized, if even noticed, rests of colonialism are still not entirely devoid of political import; the ambiguous effects of racialized advertising in particular are gauged using qualitative interviews. In Chap. 14, traces are linked to video surveillance, CCTV culture, and security space. Drawing on Foucault’s work on disciplinary power, Lysova tries to keep together theories on surveillance society and the notions of security and governmentality; using the concept of traces, she proves how these two different strategies of implementation of surveillance might coexist. The intertwinement of traces and personal freedom is addressed also in Allegri’s chapter, focused on the right to be forgotten—the erasure of what one has left online in order to protect her/his own identity. Minor past oversights and imprudent emotional manifestations can hunt their protagonists long after they have already forgotten about them, continuing to affect people’s reputation; Allegri takes into account the legal debate (and the decisions made by the European Convention for the Protection of Human Rights and Fundamental Freedoms) on such issues for opening up new interpretative possibilities and policy-making strategies. In the final chapter of Part III, Susca engages with Bauman’s and Zuboff’s theories regarding visibility, surveillance, and capitalism. Traces, here, are examined in a new and original perspective: why do social actors keep leaving traces of even intimate actions that made them easier to be profiled and oriented? Susca unravels the tradeoff between personal autonomy and selective advantages, offering perceptive sociological considerations on future developments.

The fourth and last part of this volume is Mertonianly titled “Traces as Strategic Research Materials.” We have already clarified that the concept of traces is rather close to Merton’s idea that some facts are better suited than others to construct hypotheses and, basically, to make social science out of data (see Swedberg, 2019). This final part features some epistemological and empirical arguments aimed at

advancing such a heuristic claim. In Chap. 17, Rava analyzes matters of significance and meaninglessness, intentionality, and unawareness, in terms of a semiotics investigation. Using the prism of Internet trolling, she argues that even apparently trivial and inconsequential footprints of provocative online behavior might end up being fully significant indicators, semiotically investigable using the paradigm of traces. The stress on traces as distinctive social facts of study, strategic for grasping many nuances of contemporary digital culture, continues in Amaturò's and De Falco's chapter. They specifically focus on the panoply of geographic traces resulting from GPS technologies and the so-called social Internet of things: geomediatization and digital economy are examined, originally, within the framework of actor-network theory. In Chap. 19, the sociology of traces is usefully fertilized with the work of classical social scientists, drawing in particular on the Katz-Lazarsfeldian tradition of empirical research on personal influence, still central in digital methods. Breaking down several methodological strategies (web sentiment analysis, text mining, and social network analysis among others), Sonzogni tries to hold traditional and modern approaches together, underscoring both their differences and analogies. Chapter 20 combines methodological and epistemological reflections too, in this case for reaching a more precise understanding of virtual footprints' different shades; Arosio distinguishes online found data (digital traces), online retrieved data (web-mediated documents), and online captured data (online behaviors). She also offers meticulous distinctions as for the inadvertent vs. deliberate character of traces as well as for more or less unobtrusive measures of digital activities. In Chap. 21, Barbotto embarks on a journey through traces that allows the reader to acquire a panoramic perspective on the semiosphere, including issues regarding contemporary art, everyday life, and physiognomy; several techno-aesthetic variations of action and perception are addressed, and the possibility of generating new traces via elimination/interpolation of previous ones is explored. In the last chapter, Romania adopts a Goffmanian perspective for making sense of what he defines as "shameful traces"—the trail of marks left behind by image-based sexual abuses. Romania picks the story of Tiziana Cantone (an Italian woman who committed suicide in 2016 after the nonconsensual dissemination of her intimate images) as a case study, which is then articulated within a broader symbolic interactionist framework carefully constructed around the concept of trace.

A Call for (More) Research

This volume is not self-explanatory (or, if you will, reflexive) enough to be considered itself as a trace—it is a signal more than a sign (Bacharach & Gambetta, 2001). Still on what this volume is not, rather than describing a supposedly full-fledged area of studies, it aims at opening up new possibilities. Focusing on the role of traces in contemporary societies points to new methodological and conceptual challenges. The critical questions for big "data", raised by boyd and Crawford (2012) more than a decade ago, remain largely unanswered; by questioning the "era of big data" and considering the wide variety of digital traces left behind by people, they asked: "will

large-scale search data help us create better tools, services, and public goods? Or will it usher in a new wave of privacy incursions and invasive marketing? Will data analytics help us understand online communities and political movements? Or will it be used to track protesters and suppress speech? Will it transform how we study human communication and culture, or narrow the palette of research options and alter what ‘research’ means?’ (boyd & Crawford, 2012: 662). When it comes to the design of digital tools and services, with specific concern to social media environments, the tension between the public good and invasive marketing strategies is still strong, while social media platforms are growingly gaining momentum and power over their users. Data analytics is surely helping us better understand online civic and political engagement, while they are also employed to track protesters and orchestrate global dis- and misinformation campaigns, let alone cyberwar initiatives, often relying on bots. We still need to figure out, doubtlessly, how big data (and digital traces) will transform the ways in which we study human communication and culture. On the one hand, over the last decade, several big data-driven research on social and cultural problems seem to have failed even asking appropriate and relevant questions or adopting solid frameworks for interpreting data. On the other hand, some social scientists, by refusing to dig deeper into these unprecedented amounts of data, seem to have missed the chance of contributing solid methodological and conceptual models to an ever-growing line of research.

This book collects contributions from several sub-fields of social sciences, proposing different methodological and conceptual approaches to the study of online and offline traces. We do believe this sample constitutes a call for further involvement, by social scientists, in such an important stream of scholarship. From both a conceptual and a methodological perspective, traces and footprints represent a promising research field—they are extremely good to think with and yet underappreciated by scholars. From both a scholarly and a societal perspective, it is of utmost importance that boyd and Crawford’s questions (2012) do not remain unanswered.

References

- Airoldi, M. (2021). *Machine habitus: Toward a sociology of algorithms*. Polity.
- Allen, A. (2016). The ‘three black teenagers’ search shows it is society, not Google, that is racist. *The Guardian*, June 10.
- Atkinson, P. (2018). The spirit of abduction. *Contemporary Sociology*, 47(4), 415–417.
- Bacharach, M., & Gambetta, D. (2001). Trust in signs. In K. S. Cook (Ed.), *Trust and society* (pp. 148–184). Russell Sage Foundation.
- Bardiot, C. (2021). *Performing arts and digital humanities: From traces to data*. Wiley.
- Bassi, K. (2016). *Traces of the Past. Classics between history and archaeology*. University of Michigan Press.
- Bloch, M. (1992). *The historian’s craft*. Manchester University Press.
- Bouton, C. (2020). The privilege of the present: Time and the trace from Heidegger to Derrida. *International Journal of Philosophical Studies*, 28(3), 370–389.
- boyd, d., & Crawford, K. (2012). Critical questions for big data: Provocations for a cultural, technological, and scholarly phenomenon. *Information, Communication & Society*, 15(5), 662–679.

- Brahim, B., & Lotfi, A. (2020). A traces based system helping to assess knowledge level in e-learning system. *Journal of King Saud University - Computer and Information Sciences*, 32(8), 977–986.
- Bucher, T. (2017). The algorithmic imaginary: Exploring the ordinary affects of Facebook algorithms. *Information, Communication and Society*, 20(1), 30–44.
- Bucher, T. (2018). *If... Then: Algorithmic power and politics*. Oxford University Press.
- Burnier, C., & Massonnet, G. (2020). Forensic analysis of condom traces: Chemical considerations and review of the literature. *Forensic Science International*, 310(110255), 1–14.
- Chu, C. H., Nyrup, R., Leslie, K., Shi, J., Bianchi, A., Lyn, A., et al. (2022). Digital ageism: Challenges and opportunities in artificial intelligence for older adults. *The Gerontologist*, online first.
- Crampton, J., Frère, C. H., & Potvin, D. A. (2022). Australian Magpies *Gymnorhina tibicen* cooperate to remove tracking devices. *Australian Field Ornithology*, 39, 7–11.
- De Brigard, F. (2014). The nature of memory traces. *Philosophy Compass*, 9(6), 402–414.
- Dragojlović, A., & Samuels, A. (2021). Tracing silences: Towards an anthropology of the unspoken and unspeakable. *History and Anthropology*, 32(4), 417–425.
- Eaton, A. W. (2020). Artifacts and their functions. In I. Gaskell & S. A. Carter (Eds.), *The Oxford handbook of history and material culture* (pp. 35–53). Oxford University Press.
- Eco, U., & Sebeok, T. (Eds.). (1983). *The sign of three: Dupin, Holmes, Peirce*. Indiana University Press.
- Eidelsztein, A. (2018). *The graph of desire: Using the work of Jacques Lacan*. Routledge.
- Elias, A. S., & Gill, R. (2018). Beauty surveillance: The digital self-monitoring cultures of neoliberalism. *European Journal of Cultural Studies*, 21(1), 59–77.
- Fasanella, A. (2022). The Unmarked and the Methodology of Social Research. In C. Lombardo & L. Sabetta (Eds.), *Against the background of social reality. Defaults, commonplaces, and the sociology of the unmarked*. Routledge.
- Fasanella, A., & Sabetta, L. (2022). Theory as an option or theory as a must? The bearing of methodological choices on the role of sociological theory. In C. Crothers & L. Sabetta (Eds.), *The anthem companion to Robert K. Merton* (pp. 107–131). Anthem.
- Fernández-Ardévol, M., Belotti, F., Ieracitano, F., Mulargia, S., Rosales, A., & Comunello, F. (2020). “I do it my way”: Idioms of practice and digital media ideologies of adolescents and older adults. *New Media and Society*, 24(1), 31–49.
- Ferraris, M. (2012). *Documentality. Why it is necessary to leave traces*. Fordham University Press.
- Galinon-Méléneć, B. (2016). From “traces” and “human trace” to “human-trace paradigm”. In P. Bourguine, P. Collet, & P. Parrend (Eds.), *First complex systems digital campus world e-conference 2015* (pp. 337–349). Springer.
- Gershon, I. (2010). *The breakup 2.0: Disconnecting over New Media*. Cornell University Press.
- Gibbs, R. W. (1999). *Intentions in the experience of meaning*. Cambridge University Press.
- Gillespie, T. (2014). The relevance of algorithms. In T. Gillespie, P. J. Boczkowski, & K. A. Foot (Eds.), *Media technologies: Essays on communication, materiality, and society* (pp. 167–193). MIT Press.
- Gillespie, T. (2016). Algorithm. In B. Peters (Ed.), *Digital keywords: A vocabulary of information society and culture* (pp. 18–30). Princeton University Press.
- Ginzburg, C. (1979). Clues: Roots of a scientific paradigm. *Theory and Society*, 7(3), 273–288.
- Ginzburg, C. (2012). *Threads and traces: True false fictive*. University of California Press.
- Ginzburg, C. (2017) *Unintentional revelations: Reading history against the grain*, in Id. *Exploring the boundaries of microhistory*, “The Fu Ssu-nien Memorial Lectures 2015” (pp. 41–81). Academia Sinica.
- Gómez-Barris, M., & Gray, H. (2010). Toward a sociology of the trace. In M. Gómez-Barris & H. Gray (Eds.), *Toward a sociology of the trace* (pp. 1–15). University of Minnesota Press.
- Gottschalk, L. (1950). *Understanding history: A primer of historical method*. Knopf.
- Haraway, D. (1985). A manifesto for cyborgs: Science, technology, and socialist feminism in the 1980s. *Socialist Review*, 15(80), 65–107.
- Heil, J. (1978). Traces of things past. *Philosophy of Science*, 45(1), 60–72.
- Heiskala, R. (2021). *Semiotic sociology*. Palgrave.

- Hulanicki, A. (2016). Characteristics and specificity of trace analysis. In I. Baranowska (Ed.), *Handbook of trace analysis: Fundamentals and applications* (pp. 3–16). Springer.
- Jarvis, W. E. (2003). *Time capsules. A cultural history*. McFarland and Co.
- Johung, J., & Sen, A. (Eds.). (2013). *Landscapes of mobility: Culture, politics, and placemaking*. Routledge.
- Kitchin, R. (2017). Thinking critically about and researching algorithms. *Information, Communication and Society*, 20(1), 14–29.
- Kline, R., & Pinch, T. (1996). Users as agents of technological change: The social construction of the automobile in the rural United States. *Technology and Culture*, 37(4), 763–795.
- Klinger, U., & Svensson, J. (2018). The end of media logics? On algorithms and agency. *New Media and Society*, 20(12), 4653–4670.
- Law, J. (1990). Monsters, machines and sociotechnical relations. *The Sociological Review*, 38(1), 1–23.
- Lazarsfeld, P. F. (1950). The obligations of the 1950 pollster to the 1984 historian. *Public Opinion Quarterly*, 14(4), 617–638.
- Lazarsfeld, P. F. (1953). A conceptual introduction to latent structure analysis. In Id (Ed.), *Mathematical thinking in the social sciences* (pp. 349–387). The Free Press.
- Lazarsfeld, P. F. (1958). Evidence and inference in social research. *Daedalus*, 87(4), 99–130.
- Lombardo, C., & Sabetta, L. (2021). The appearance of nothingness: Concealed strategic actions. In W. Brekhus, T. DeGloma, & W. R. Force (Eds.), *The Oxford handbook of symbolic interaction* (pp. 1–21). Oxford University Press. (online first).
- Lucas, G. (2012). *Understanding the archeological record*. Cambridge University Press.
- Lupton, D. (2016). *The quantified self*. John Wiley & Sons.
- MacDonald, M. J. (1991). “Jewgreek and Greekjew”: The concept of the trace in Derrida and Levinas. *Philosophy Today*, 35(3), 215–227.
- Matuozzi, R. N. (2004). Review of time capsules: A cultural history by William E. Jarvis. *Libraries and Culture*, 39(2), 241–243.
- Mayer-Schoenberger, V., & Cukier, K. (2013). *Big data. A revolution that will transform how we live, work, and think*. Eamon Dolan.
- Merton, R. K. (1968). *Social theory and social structure*. The Free Press.
- Merton, R. K. (1987). Three fragments from a sociologist’s notebooks: Establishing the phenomenon, specified ignorance, and strategic research materials. *Annual Review of Sociology*, 13, 1–28.
- Misak, C. (2013). *The American pragmatists*. Oxford University Press.
- Momigliano, A. (2016)[1974]. The rules of the game in the study of ancient history. *History and Theory*, 55(1), 39–45.
- Muir, E. (1991). Introduction: Observing Trifles. In E. Muir & G. Ruggiero (Eds.), *Microhistory and the lost peoples of Europe* (pp. 7–28). The Johns Hopkins University Press.
- Mulligan, C. E. A. (2014). *The impact of datafication on strategic landscapes*. Ericsson Working Paper.
- Nagy, P., & Neff, G. (2015). Imagined affordance: Reconstructing a keyword for communication theory. *Social Media+ Society*, 1(2), 1–9.
- Napolitano, V. (2015). Anthropology and traces. *Anthropological Theory*, 15(1), 47–67.
- Noble, S. U. (2018). *Algorithms of oppression*. New York University Press.
- Olteanu, A., Stables, A., & Bortun, D. (2019). *Meanings & Co.: The interdisciplinarity of communication, semiotics and multimodality*. Springer.
- Orgel, S. (2015). *The reader in the book: A study of spaces and traces*. Oxford University Press.
- Oudshoorn, N., & Pinch, T. (2003). *How users matter: The co-construction of users and technology (inside technology)*. MIT Press.
- Pape, H. (2008). Searching for traces: How to connect the sciences and the humanities by a Peircean theory of indexicality. *Transactions of the Charles S. Peirce Society*, 44(1), 1–25.
- Parisi, L., & Comunello, F. (2020). Dating in the time of “relational filter bubbles”: Exploring imaginaries, perceptions and tactics of Italian dating app users. *The Communication Review*, 23(1), 66–89.
- Pasquale, F. (2015). *The black box society: The secret algorithms that control money and information*. Harvard University Press.

- Peltonen, M. (2012). The method of clues and history theory. In S. Fellman & M. Rahikainen (Eds.), *Historical knowledge: In quest of theory, method and evidence* (pp. 45–76). Cambridge Scholars Publishing.
- Reed, I. A. (2020). *Power in modernity. Agency relations and the creative destruction of the king's two bodies*. University of Chicago Press.
- Rosales, A., & Fernández-Ardèvol, M. (2020). Ageism in the era of digital platforms. *Convergence*, 26(5-6), 1074–1087.
- Rosales, A., & Svensson, J. (2021). Perceptions of age in contemporary tech. *Nordicom Review*, 42(1), 79–91.
- Sabetta, L. (2020). Ethnography (and social research) between words and deeds. *Emografia e Ricerca Qualitativa*, 3(2020), 483–495.
- Savage, M., & Burrows, R. (2007). The coming crisis of empirical sociology. *Sociology*, 41(5), 885–899.
- Servida, F., & Casey, E. (2019). IoT forensic challenges and opportunities for digital traces. *Digital Investigation*, 28, S22–S29.
- Stille, A. (1995). *Excellent cadavers. The Mafia and the death of the First Italian Republic*. Random House.
- Swedberg, R. (2018). On the near disappearance of concepts in mainstream sociology. In H. Leiulfstrud & P. Sohlberg (Eds.), *Concepts in action* (pp. 23–39). Brill.
- Swedberg, R. (2019). How do you make sociology out of data? Robert K. Merton's course in theorizing (Soc 213–214). *The American Sociologist*, 50(1), 85–120.
- Tilly, C. (2002). Event catalogs as theories. *Sociological Theory*, 20(2), 248–254.
- Timmermans, S., & Tavory, I. (2012). Theory construction in qualitative research: From grounded theory to abductive analysis. *Sociological Theory*, 30(3), 167–186.
- Van Dijk, J., Poell, T., & De Waal, M. (2018). *The platform society: Public values in a connective world*. Oxford University Press.
- Wiltshire, P. (2019). *Traces. The memoir of a forensic scientist and criminal investigator*. Bonnier.
- Zemon Davis, N. (2010). *A passion for history. Conversation with Denis Crouzet*. Truman State University Press.
- Zerubavel, E. (2003). *Time maps: Collective memory and the social shape of the past*. The University of Chicago Press.
- Zuboff, S. (2019). *The age of surveillance capitalism: The fight for a human future at the new frontier of power*. Profile books.

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