

## Excavating Infrastructure in the Analog Humanities' Lab: An Analysis of Claude Lévi-Strauss's Laboratoire d'anthropologie sociale

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### Abstract

In this paper I present Claude Lévi-Strauss's *Laboratoire d'anthropologie sociale* (LAS), established in 1960, as a case study of the archaeology of the humanities infrastructure. Building on media archaeology and critical infrastructure studies, I stress the significance of the research infrastructure in the analog humanities and I show how the LAS was organized around the Human Relations Area Files (HRAF), a vast ethnographical pre-electronic repository produced at Yale. The paper looks into how the *Files* were mobilized to secure funding and space for Lévi-Strauss's lab and gain infrastructural advantage (boosted by the *Files*' paperiness), helping it then to establish its position as "richly endowed." As I suggest, it might be due to these pragmatic considerations – not recognized as epistemically valid – that the Laboratory has not had any important place in the readings of Lévi-Strauss's work. The paper also highlights "care work" – taking care of resources and relocations – undertaken by Lévi-Strauss and his collaborators. Finally, examining the rationale and history of the HRAF and looking at its use at the LAS, I demonstrate how the tool was refitted to serve the particular needs and ambitions of the Parisian lab.

### Introduction

Revisiting a certain chapter in the history of structuralism from the point of view of contemporary digital research in the humanities sounds in no way provocative or controversial. Claude Lévi-Strauss's structuralism, with its systemic, large-scale view, has already been referred to in the context of digital humanities, as in Alan Liu's article discussing the backdrop for the DH-fuelled debates on meaning [Liu 2013]. Moreover, there has been some evident interest in structural anthropology's liaisons with computers (for instance: [Seaver 2014]) and its linkage with cybernetics [Geohegan 2011]. As I will show in this paper, it is also by dint of its specific institutional and infrastructural making that the structuralist movement continues to prove compelling for today's research agenda in the digital humanities. With *Laboratoire d'anthropologie sociale* as its main hothouse, Lévi-Straussian anthropology appears to have been an early adopter of the now increasingly popular idea of the humanities lab. 1

This paper uses a case study of Claude Lévi-Strauss's Laboratory of Social Anthropology, or simply the LAS, officially established at the Collège de France in 1960 and still a part of its structure, to gain insights into the significance of infrastructure in the analog humanities laboratory. In order to cast some light on the physical situatedness of the LAS and the pragmatic, entrepreneurial side of its workings, I will discuss how this lab was initially organized around its prominent research apparatus – namely, the Human Relations Area Files, commonly referred to as the *Files* or HRAF – and how this instrument was mobilized by Lévi-Strauss to secure funding and space and fulfill the goals as well as scientific ambitions of structural anthropology. 2

What exactly were the *Files*? In hindsight, they appear to be a vast pre-electronic ethnographical database. Their creators described this instrument as "a collection of primary source materials" as well as a "major data retrieval system" [Lagacé 1974, ix]. HRAF, produced at Yale, served as a repository of selected ethnographic literature, mainly already-published articles and books written in or translated into English, with the aim being to cover all known cultures (or at least a representative sample of them). 3

Each paragraph of a text was annotated and indexed by HRAF analysts using two sets of categories. The first (known as *Outline of World Cultures*) was geographical, with each world region, ethnic and cultural group ascribed an individual numeric code. The second (*Outline of Cultural Materials*) involved indexing the materials according to subject matter, which ultimately strives to cover all aspects of human existence (from religion, magic, kinship, law and political systems to technology, cuisine and sexual practices, etc.). In each file on a particular culture, the source texts were reproduced both in full, maintaining the original page order, as well as in processed form, thus bearing significant amounts of metadata (on multiple levels), with the pages relating to a particular subject grouped together. Each page of a document also contained a header featuring standard bibliographical information as well as the codes (or notations) signaling, for example, the level of education attained by the author or an assessment of the quality of the source. Also attached was the *File Guide* that included information on which other sources relating to a particular culture had also been consulted but not included among the *Files*. The name of the HRAF analyst who created the particular text was also given. Examples of sample file pages could be found in [Lagacé 1974] and on the HRAF website.<sup>[1]</sup> A glimpse of these multilayered metadata and indexing methods is still offered to some extent by today's eHRAF online database – here are examples of the HRAF files of Claude Lévi-Strauss's ethnographic texts on the Nambicuara and Bororo.

The screenshot displays the eHRAF World Cultures website interface. The top navigation bar includes 'BASIC Search', 'ADVANCED Search', 'Browse CULTURES', 'Browse SUBJECTS', and 'Browse DOCUMENTS'. The main content area is titled 'Publication Information' and provides the following details:

- Author:** Lévi-Strauss, Claude
- Title:** The Social use of kinship terms among Brazilian Indians
- Published in:** American anthropologist, n.s. -- Vol. 45
- Published By:** American anthropologist, n.s. -- Vol. 45 Menasha: American Anthropological Association, 1943. 398-409 p.
- By line:** Claude Lévi-Strauss
- HRAF Publication Information:** New Haven, Conn.: HRAF, 2010. Computer File
- Culture:** Nambicuara (SP17)
- Subjects:** Kinship terminology (601); Kin relationships (602); Standard of living (511); Siblings-in-law (607); Polygamy (595); Homosexuality (838); Social relationships and groups (571); Disasters (731); Community structure (621); Linguistic identification (197); Cultural participation (184); Regulation of marriage (582); Conception (842); Social placement (851);
- Abstract:** This is a comparative study of one aspect of kin term usage among the Nambicuara and the Tupi of the sixteenth century, devoted mainly to what Lévi-Strauss terms the 'compérage' - a special 'brother-in-law' relationship between individuals not united previously by any kinship tie in order to insure intermarriage and by this means to amalgamate familial or social groups, previously heterogeneous, into a new homogeneous unit. He gives an instance where this relationship was brought into effect for uniting two distinct groups of the Nambicuara. He believes this institution once had a much wider distribution on the South American continent. At the time of publication, Lévi-Strauss was with the New School for Social Research in New York.
- Document Number:** 6
- Document ID:** sp17-006
- Document Type:** Journal Article
- Language:** English
- Field Date:** 1938-1939
- Evaluation:** Ethnologist-5

**Figure 1.** HRAF metadata to Lévi-Strauss's "The Social use of kinship terms among Brazilian Indians." eHRAF World Cultures. Screenshot by the author

**Figure 2.** Lévi-Strauss’s paper “Contribution to the study of the social organization of the Bororo Indians” (page 13) annotated on the paragraph level in the eHRAF database. eHRAF World Cultures. Screenshot by the author

## Analog humanities lab

My interest in the LAS and its practicalities developed while conducting research within the collaborative project “The humanities laboratory as a mode of knowing. From archaeology to a project”, designed with Jacek Małczyński and Dorota Wolska and reflecting upon the forms a laboratory-type approach to scholarship could take in the humanities.<sup>[2]</sup> Starting from the basic premise that the humanities laboratory is a distinct mode of knowing and that it is not to serve as a mere imitation of the scientific lab (despite its obvious adjacency to that domain), we assume the following determinants in helping to grasp specificity of this modus: (1) experimenting, (2) collaboration, (3) the significance of the research infrastructure, (4) openness (personal, discipline-wise, and institutional), (5) the labile position of the researcher (fluidity of the boundaries between the inside and the outside of the laboratory, and the resulting problem of the humanist’s involvement). In an attempt to revise the image of the laboratory as an institution of strictly natural sciences and to search for deeper discursive layers of this particular knowledge-making setting, we have taken up the *archaeology of the humanities laboratory*.<sup>[3]</sup>

For at least a decade the humanities have seen a conspicuous proliferation of new initiatives labelled as laboratories. Little is known, however, about their historical forms. Analysis of them, in a somewhat Foucauldian manner, steers clear of seeking the unequivocal origins of the humanities lab and creating a “linear” history – instead it foregrounds recursion and the element of chance in the process of constituting the humanistic laboratory. Exploring the LAS as one of the prefigurations of the contemporary humanities labs<sup>[4]</sup> and focusing on its “infrastructural advantage”, which will be explicated later on, is intended here as a deliberate media-archaeological move, undermining claims that the observed “laboratorization” of the field is merely a recent and fleeting trend.

In this archaeological vein, I situate Lévi-Strauss’s lab in the *analog humanities*. I adopt a notion of the analog humanities, aiming to use it in a more rigorous, theory-laden sense rather than simply in a non-methodical, metaphorical way, sometimes signaled by the quotation marks around the term. What I propose is to instill a kind of reflexivity or a retrospective, pre-posterous logic in it (a notion of *pre-posterous*, pertaining to history and meaning intentional anachronisms, is borrowed from the Dutch art historian Mieke Bal). As Jonathan Sterne argues:

the *analog humanities* refers to a nexus of methodological, technological, and institutional conditions across the humanities that have only come into clear focus in retrospect. They refer to the cultural and material infrastructures on which humanists depended and still depend. [Sterne

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In this sense the term serves as a heuristic, “a *rhetorical before*, to accompany the digital,” despite being somewhat “monolithic” [Sterne 2015, 19]. One could say that this idea of the analog humanities perfectly embodies the pre-posterous thinking (where “pre-” and “post-” are being playfully reconfigured) since it evolved and actually made sense *after* the digital turn in the humanities had drawn our attention to the technological modes of inquiry and to epistemic implications of the academic infrastructures. However, the term is not intended here merely as a negative; a blurry category denoting everything being pre-digital or not-digital. Elsewhere, in his entry on the analog in the *Digital Keywords*, Sterne claims that “we should return some specificity to *the analog* as a particular technocultural sphere” [Sterne 2016, 41] — it is not to denote any natural (pre-technical) state of the world, but rather a certain technology of inscription (or representation). With a background in sound studies and the history of sound recording, Sterne conceives of the analog era as a period dominated by analog technologies reproducing print, sound, video and images, but not erasing any earlier media.<sup>[5]</sup> Being rather chronologically specific (although not in a strict way), the notion of analog humanities thus irresistibly seems a periodization concept (which could be deemed problematic).<sup>[6]</sup> Even if we cannot entirely avoid this logic, I would argue that the analog humanities serve here as a term identifying a particular technocultural state of scholarship; that is, the role of the word “analog” in this expression is primarily to emphasize mediality of knowledge production in the humanities and not so much to carve out a certain era.<sup>[7]</sup> In this way perhaps the *analog humanities* could still make sense in light of the debates on the post-digital, which, as David M. Berry argues, currently defines our times. Berry and Fagerjord notes that Sterne’s definition of the analog humanities is useful in exploring the links between media and epistemology in the humanities, although “it might overstate the disjuncture between ‘analog’ and ‘digital’” [Berry and Fagerjord 2017].<sup>[8]</sup>

Therefore, in my paper I follow Sterne – I understand the analog humanities as a concept retrospectively facilitated by the digital humanities, intended to characterize a techno-cultural condition of the earlier scholarship. At the same time, I see the analog humanities not as everything that preceded the digital and post-digital age, but rather as a media ecology of print, index cards, typewriters, sound recordings, transparencies, overhead projectors, copiers and microfiches, etc., used by the scholars, especially in the second half of the twentieth century, to which my case study points to. If we were to find a vivid and detailed illustration of this, a description of the LAS’s first interior, written by Emmanuelle Loyer, a biographer of Lévi-Strauss, comes to mind:

Desks, closets, metal filing cabinets, slide and microfilm cabinets, a ladder, a coat rack, two secretary desks, ten armchairs, as well as data processing and scientific machines: a stencil duplicator, two photocopy machines (Arcor and Polymicro), a projector for still images, two microfilm readers, an electric calculator, a stereophonic record-player, a camera, three tape recorders, electric typewriters (Olivetti, “extended carriage” Everest, Olympia, Royal, etc.), and a celestial globe. [Loyer 2018, 385]<sup>[9]</sup>

By the “analog humanities lab” I understand the laboratory of the analog humanities or, to make it more pleonastic, the humanities laboratory which emerged from the analog humanities (of which the LAS happens to be an instantiation). The humanities laboratory is seen as a mode of knowing, but certainly in the case of the LAS it also materializes as a research institution under the very label of the lab (and with the physical premises). Lévi-Strauss’s laboratory constitutes a good case to be investigated within the framework I adopt in this paper, but naturally it is not the only example of the analog humanities.<sup>[10]</sup>

The framework of this study is the archaeology of the humanities infrastructure, built upon media archaeology<sup>[11]</sup> and informed by the critical infrastructure studies.<sup>[12]</sup> The work being done in this vibrant subfield of the humanistic theory encourages us to examine infrastructure as unavoidably relational<sup>[13]</sup> and heterogenous, comprising material equipment and installations as well as their human builders and operators, underlying protocols, ideas, or standards. In other words, it highlights both ‘the hard and soft scaffolding’ of research, as named by Shannon Mattern (2016). Furthermore, infrastructure critics and theorists helpfully remind us to study media “with an infrastructural disposition, that is, with questions of resources and distribution in mind” [Parks 2015, 357], performing an “infrastructural inversion –

foregrounding the truly backstage elements of work practice” [Star 1999, 380] and to “engage with infrastructure on the level of packaging” [Svensson 2015, 345]. In the case of Lévi-Strauss’s Laboratory, the latter could be understood quite literally – as ways of handling tons of packages filled with paper files and sent regularly from New Haven, Connecticut to Paris since the beginning of the 1960s. It is this concrete piece of infrastructure that mostly preoccupies me in this paper and I dwell on the reasons for it in the sections that follow.

## The HRAF as humanities infrastructure

Before turning directly to the nitty-gritty of the LAS, it ought to be mentioned that there has in fact been very little exploration and discussion of the significance of the laboratory in relation to Lévi-Strauss’s oeuvre.<sup>[14]</sup> What could possibly account for such a surprising marginalization or lack of interest? Together with Małczyński and Wolska I posited that the laboratory idea could either have been forgotten (as a relatively minor element of the structuralist program) or overlooked because of the dominance of anti-laboratory ways of thinking fostered by the interpretive anthropology after the peak of structuralism had passed.<sup>[15]</sup> Perhaps it might also be the case that the laboratory has neither been forgotten nor overlooked, but has instead been passed over in silence in light of the pragmatic reasons behind its founding. These very reasons will be revealed as my “infrastructural inversion” unfolds, making a case for the *significance* of infrastructure (as one of the hypothetical determinants of the humanities laboratory listed above), understood in a twofold way – as evidenced by the dictionaries, significance could mean both importance, the quality of being worthy of attention and the ability to convey meaning. The latter could be further interpreted within the media studies perspective, asserting that conveying is hardly epistemically neutral and that to convey meaning would be at the same time to shape it. We can rephrase it into a question of how research tools, spatial arrangements and management of resources affect the process of humanistic knowing.

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As already stated, infrastructure is of vital importance to my description of the LAS. Not only does it result from a chosen approach (according to which the HRAF prefigures research infrastructure as we know it today – for example a digital repository), but it is also grounded in primary source material – Lévi-Strauss’s own statements show that the *Files*, acquired with no little difficulty, were at the heart of the Laboratory’s work. Lévi-Strauss admitted that the HRAF formed the center around which he built the institution and that the role of this research instrument was “comparable to that of the telescope or electron microscope in the natural sciences” (cited in: Abélès 2008, 66). What this comparison clearly shows is that while grasping infrastructure in the humanities, one is likely to be challenged by its juxtaposition with science.

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Therefore, to stress the situatedness of the apparatuses and avoid modelling humanistic infrastructure on the sciences, Patrik Svensson puts forward the idea of the humanistiscope, which “is much less laden than the aforementioned devices, although it borrows from a scientific infrastructural logic and the Greek for ‘to look/examine’ (which also points to the commonplace privileging of the visual in the infrastructure turn)” [Svensson 2015, 339]. In his paper, Svensson examines which assumptions and expectations are deeply entrenched in the very concept of infrastructure, relating it to science and engineering. Interestingly, the HRAF – although it is “just” a paper-based collection of indexed ethnographic reports – falls exactly into this category by being (1) expensive,<sup>[16]</sup> (2) “used beyond single research groups,”<sup>[17]</sup> (3) having “considerable longevity” and (4) “a sense of discreteness and unity,” being “described by a name or a phrase” [Svensson 2015, 345], or, we could add, in this case also by an acronym. The HRAF thus constitutes a perfect instantiation of infrastructure tout court. Likewise, it meets the basic criteria of infrastructure proposed by Susan Leigh Star (1999, 381-382), such as embeddedness in other structures or layers, transparency (unless it breaks) and taken-for-grantedness, significant reach, modularity, the ability to embody standards and protocols and a nature that is learnt and practiced through community-driven conventions.

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It seems particularly relevant to consider a lab of the analog humanities in terms of its infrastructure. The humanities have always had infrastructure even if it was rather unlikely to be recognized as readily as in the case of the contemporary cyberinfrastructure and the digital labs. Commenting on a common (and erroneous) notion that the humanities in general do not actually have (or have had) infrastructure, Svensson writes:

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the view of basic humanities as having little or no significant infrastructure not only assumes a

science- and technology-based idea of what makes up infrastructure but also imposes a pen-and-paper construction of the humanities. Pen and paper, while inherently communicative and collaborative, is also linked to the assumption that humanities scholarship is to a large extent a solitary endeavor. [Svensson 2015, 147]

The *Files* serve here as a puzzling example eluding straightforward typologies – they fulfill a pen-and-paper model only partially: as paper files comprising photocopies of articles and monographs which had earlier been annotated by hand by the analysts and as a collectively authored tool designed to aid an individual researcher’s work as well as to diversify pedagogy at both pre-university and college level. In addition, despite being made from paper, the HRAF Files have always seemed to be heading into the digital age, being more than suitable for informatization. Today the HRAF exists as online databases (eHRAF World Cultures and eHRAF Archaeology).<sup>[18]</sup>

To unpack the HRAF as foundational infrastructure in the LAS I am posing the following questions: how and when did the *Files* find their way to Lévi-Strauss’s Laboratory? How did they operate? What did they bring along – in terms of any in-built theory, methods, scientific rationale as well as reputation, possible connotations and network of allies and foes? How was the HRAF put to use (or repurposed) in the particular setting of the LAS and in Lévi-Strauss’s own work? What was its position then and what status does it enjoy today?

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## Infrastructural advantage and the persistence of paper

Moving on to describe in greater detail the inner workings of the LAS and its use of the HRAF, one should actually start from the beginning. But when exactly was that? It is difficult to pinpoint when Lévi-Strauss first learnt about the *Files*. Having spent several years in the US meeting the most prominent American anthropologists, he availed himself of cutting-edge trends and methods and must have heard of the widely advertised initiative started at Yale University by the anthropologist George Peter Murdock.<sup>[19]</sup> As reported in a volume published for the occasion of the LAS’s fiftieth anniversary [Zonabend et al. 2010, 4], Lévi-Strauss managed to acquire the files as early as 1958, two years before the Laboratory was formally established. He might have benefitted from his role as secretary general of the International Social Science Council, founded under the auspices of UNESCO (of which he happened to say that it was an organization “without goal or function,” but in disposition of “some means” [Lévi-Strauss and Eribon 1991, 60–61]. With UNESCO funding and thanks to the efforts of Gaston Berger from the French Ministry of National Education, Claude Lévi-Strauss’s Laboratory (as a part of the *École pratique des hautes études*) came into possession of the only complete paper copy of the HRAF card index in Europe. As Lévi-Strauss noted, he succeeded in this mission “after many tribulations;” moreover, the funding conditions meant that his center was obliged to make the HRAF available to any interested party [Lévi-Strauss and Eribon 1991, 63].

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If we were to apply the categories used in describing competition over natural resources, we could say that it was because of the files that LAS acquired *infrastructural advantage*, having access to something otherwise unavailable outside North America and Japan. In order to emphasize its “ownership” of the imported papers or to “domesticate” them – for HRAF members did not technically own the files, they only enjoyed the privilege of keeping and using them – the Laboratory gave its own name to the collection – *Centre documentaire d’ethnologie comparée*.<sup>[20]</sup> The infrastructural advantage of the LAS was of course closely related to prestige and the sense of exclusivity which was in turn – perhaps surprisingly – amplified by a paper technology. It should be said that in 1958 the *Files* were introduced in a microfiche format which proved quite efficient – cheaper to ship, more durable and taking up far less space. Still, the paper versions continued to be produced until 1984. Why did Lévi-Strauss’ Laboratory opt for the paper version, given its constant problems with obtaining adequate space (a more detailed account of these difficulties will follow)? After all, subscribing to the paper HRAF was burdensome, involving endless boxes of 5 x 8 inches loose paper slips which had to be carefully filed and properly stored.<sup>[21]</sup> Loyer notes that in its second year in the LAS the HRAF already consisted of “about two million index cards, organized in 380 double metal filing cabinets, weighing 7.5 tons and taking up 18 cubic meters of space” [Loyer 2018, 383].

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There are a few possible explanations of this seemingly strange preference of the LAS’s administrators (namely, Claude Lévi-Strauss and his deputy and right-hand, Isac Chiva). First is that a robust HRAF collection could have acted as a

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pretext concocted by Lévi-Strauss in his efforts to receive a more comfortable location. What is more, one of the researchers currently working in the LAS drew my attention to the fact that due to the singular rules of succession at the Collège de France, it is more likely for the chair to justify its continued existence when it possesses some expensive specialist equipment (which usually pertained to the natural sciences chairs, but also to the extraordinary resources used by humanists, like for instance particularly rich and valuable libraries or collections of artifacts).[22]

On the other hand, the persistence of paper *Files* in the LAS could have more to do with joining an international prestigious club than with locally situated institutional equilibristics. Rebecca Lemov (2015, 137) notes that the Laboratory was among the handful of first-tier subscribers (i.e. sponsor members), alongside for example Harvard, who received full-sized paper copies. Everyone else (the so called microfiles members) received miniaturized photographic reproductions.

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However, there is yet another explanation that should be considered: the limited number of twenty five paper sets of the HRAF ever produced (one set located in the headquarters at Yale and twenty-four copies entrusted to the sponsor members) was part of the arrangements made by the HRAF corporation with the publishers holding the copyrights to the ethnographic sources reprinted in the *Files* — they agreed on releasing twenty five copies in total (see: Roe 2007, 64). Expanding the number of subscribers was thus only feasible by changing the medium of publication – apparently microfiches were acceptable as derivative version of paper “originals”, which were ultimately xeroxed copies. As evidenced by a 1970 report by the HRAF president Clellan Ford (1970,39), in that period there were already eight microfiche collection of the *Files* in Europe (for instance in Germany, Holland, Sweden and Switzerland). The Laboratory of Social Anthropology in Paris was thus in charge of a truly unique resource but only for several years after its purchase or as long as we conceive this exclusivity as bound to a concrete technology of reproduction.

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Roe remarks that paper versions of HRAF indeed held some prestige – in fact, they were highly valued, kept in specially arranged and locked places and not available to students or members of the public without some precautions (such as prior training) [Roe 2007, 64]. However, what can be inferred from the updated lists of subscribers published throughout the years in occasional reports is that not every sponsor member that acquired a paper-based collection decided to keep it – hence the paper *Files* travelled to new campuses. Perhaps the membership was too costly to maintain for many years or it just seemed more practical and modern to switch to microfiches. Alternatively, apart from all the practical issues, being a part of an exclusive paper-aficionados club did not in the end turn out to be sufficiently prestigious.

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## Resources and relocations: highlighting “care work”

Fresh batches of files reached the Laboratory each year thanks to its subscription. Cataloging and storing the materials demanded ever more effort and space. Lévi-Strauss explained that this was the reason behind the Laboratory’s multiple changes of location. The Laboratory’s location for the first five years of its existence was in an annex to the Musée Guimet on Avenue d’Iéna (formerly the private residence of Emile Guimet, it was not necessarily fit to house a research organization). It comprised two rooms, with the largest being almost completely filled by the files, while a smaller one (a reconfigured bathroom with the stumps of pipes protruding from the floor) was shared by several researchers: Lévi-Strauss, Isac Chiva, his collaborator Françoise Flis (Zonabend) and Jean Pouillon, the editor of *L’Homme*.<sup>[23]</sup> This did not stop Susan Sontag from claiming in her review article “A Hero of our Time” (1963) that Lévi-Strauss “heads a large and richly endowed research institute”, much to the bewilderment of Chiva. The reputation enjoyed by the Laboratory and its founder certainly encouraged one to imagine its physical location as something much grander than it was in reality.

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Its second home, this time located in the Latin Quarter (Place Marcelin-Berthelot) and installed in the Collège buildings (which, as revealed in the interview with Didier Eribon, appeared crucial to Lévi-Strauss (1991, 75)), was more grandiose but even it became too cramped over time. The burgeoning HRAF files were too heavy for the eighteenth-century building’s ceilings to bear. There was also a growing team of over thirty technical and research staff. Space was in short supply. The sound of talking and the noise generated by typewriters made working conditions in the common room difficult, if not impossible. Rooms were thus divided to create individual compartments. There seems to be a case

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here of the HRAF exerting proxemic dominance. The ability to store the *Files* even took precedence over guaranteeing individual and spacious offices for researchers. The Latourian non-human actor dominated the Laboratory's space. Accommodating the HRAF collection was an issue that made Lévi-Strauss and Chiva boldly apply for greater floorspace, customarily rather unthinkable for the human sciences facilities. Loyer points out that Lévi-Strauss requested 2,000 square meters, while the standard was 150-200, envisioning a perfect location as having "an adjoining reading room, two offices for archivists, a photographic workshop, fifteen offices for researchers and a reading and conference room" [Loyer 2018, 390–391]. The Laboratory moved to its third and current location in 1985, doubling its space.

Presenting his Laboratory in the journal *Reveu de L'enseignement supérieur*, Lévi-Strauss indicates four main areas it should develop in, namely: teaching, documentation, research and publication (1965). He spoke at length about how the training in anthropology should be organized in his text "The Place of Anthropology in the Social Sciences and Problems Raised in Teaching It" (see: Lévi-Strauss 1968). On several occasions Lévi-Strauss voiced his views on how neglected were problems of tools and resources in the human sciences, beginning his response to a UNESCO survey in 1964 with these words:

how much more efficient it would have been if, at the national level, there were the granting of a place of work to scattered researchers, who are most often demoralized by the lack of a chair, a table, and the few square yards indispensable for the decent exercise of their work; by the nonexistence or insufficiency of libraries, and the lack of funds [Lévi-Strauss 1983, 289]

Earlier on, in *The Structural Study of Myth*, where he imagines analyzing myths by disassembling them into smaller units written down on index cards, pigeon-holed and reconfigured with the help of enormous wooden boards (two meters long and one and one-half meters high), later to be replaced by perforated cards and IBM equipment, Lévi-Strauss complains about the limited means for such research in France. What he has in mind speaking of such means is "a spacious workshop", "special devices" and a team comprising both researchers and technicians. He adds: "it is much desired that some American group, better equipped than we are here in Paris, will be induced by this paper to start a project of its own in structural mythology" [Lévi-Strauss 1955, 443].<sup>[24]</sup> As evidenced by this quote, Lévi-Strauss envisaged his research as inherently collective. However, one can argue that this idea of collaboration is principally of a pragmatic (or instrumental) nature; Lévi-Strauss was aware that such a study would only be feasible (in a reasonable time) when taken up by a group.

Lévi-Strauss actively sought to secure funds and spaces, since, as he noted, they were inadequate at the outset. He was able to seize the chance of establishing a prospering human sciences lab, recognizing in the 1960s that, thanks to the French state's Fifth Plan, new funding opportunities for collective research had arrived.<sup>[25]</sup> Moreover, cognizant of the perks of the status of "laboratory chair" (which entitled the holder to greater office space), Lévi-Strauss had the faculty assembly vote to grant them such a status, although at that time only 14 out of 52 chairs in the Collège had a laboratory (see: Loyer 2018, 391). He was skilled in garnering attention, using the experience gained in the US and contacts with the charities like Rockefeller or Ford Foundation and the Wenner-Gren Foundation.<sup>[26]</sup> Loyer describes the LAS not as "a theoretical engine room" of structuralism, but rather a place where scholars "would receive resources they needed to pursue their work" [Loyer 2018, 399] – inter alia, the HRAF files.<sup>[27]</sup> For instance, Philippe Descola (later the director of the LAS) remembers that as a young researcher not yet fully engaged in the Laboratory, he benefitted from it, occasionally making photocopies (however trivial and mundane this privilege might seem for us today) [Zonabend et al. 2010, 46].

In light of the above brief reconstruction of the Lévi-Straussian knack for academic entrepreneurship, we could say that the "infrastructural disposition", advised by Lisa Parks, foregrounding questions of resources and distribution, is actually something that characterizes Lévi-Strauss. Apart from his great intellectual renown, he epitomizes the canny organizer and facilitator.

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To use a notion proposed by Antonijević, Dormans and Wyatt in their study on collaboration in virtual knowledge (2013), looking after coworkers, space, resources and budget allocations could be seen as expressions of *care work* – a sort of immaterial, affective labor in academia. Many of this informal aspects of being “caring” as well as “careful” [Antonijević et al. 2013, 66] tend to remain invisible in research outputs, difficult to discern against a backdrop of administrative documents and traditional academic genres. In posthumous overviews and summaries of the scientific legacy one is more likely to find a list of an academic’s achievements, projects, awards and publications than an appreciation like this one stating that “Lévi-Strauss was to devote a significant part of his life to channeling young (and not so young) energies and to organizing collective work” [Loyer 2018, 375].

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However, a discussion of care work in the LAS is not to depict it as an idealized, team-spirited site of academic work; free of conflicts and forming the proclaimed “direct democracy” (while Lévi-Strauss explicitly spoke of this prevailing *modus operandi*, supposedly “down to and including the cleaning woman” [Lévi-Strauss and Eribon 1991, 79], his biographer suggests it was rather an “enlightened monarchy” [Loyer 2018, 404].<sup>[28]</sup> Nor should it be suggested that Lévi-Strauss was a lone “hero” (to echo Sontag’s essay title) – in fact, a great deal of care work in the LAS must have been done cooperatively, engaging other academics and staff. This also involved taking care of the HRAF – someone had to unpack, arrange, catalog and maintain the files pouring into the LAS’ library in order to make them available. Throughout the years there have been several people managing the library (Marion Abélès, among others) and additional specialists in charge of the HRAF (Nicole Belmont, Tina Jolas, Roberto Miguelez, Solange Pinton – to name just a few) [Zonabend et al. 2010, 44–45]

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Being used to doing administrative work alongside his scientific activities, Lévi-Strauss stated that “directing the laboratory was a load” he “carried most willingly”, though not without “some secretarial help” [Lévi-Strauss and Eribon 1991, 64].<sup>[29]</sup> Also, he relied heavily on the LAS’ assistant director and his long-time closest collaborator, Isac Chiva. In a private letter to Chiva dated back to 1976, he admitted: “I have not said that the laboratory helped me directly in my own work, but that I could never have managed to do it if you had not so greatly relieved me of the task of managing that institution,” repeating this praise much later (in 2003) in another letter: “For I would never have embarked on the adventure of the laboratory if I had not known that you were ready to come along with me” (cited in: Loyer 2018, 387-388). What might be true of any academic center, the LAS could not have flourished if it had not been for a significant load of immaterial work performed by its permanent, apprentice and visiting researchers, by technicians, journal editors, research coordinators, archivists, librarians, and the secretarial personnel. Strauss could have been a central figure crucial for functioning of the lab (often attributed to him as “his” laboratory), but he also thrived on the endeavors undertaken by others. Even if, as his biographer points out, Lévi-Strauss never stopped working on his own, nourishing his “soloist” nature and spending half a day in the Laboratory and the rest in his office, it could be claimed that the LAS, the plan for which Lévi-Strauss had had in his mind for a long time,<sup>[30]</sup> constituted for him a vital knowledge environment, additionally luring many academics from around the world.

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## Background of the HRAF

Let us now turn again to the Human Relations Area Files in order to investigate the conceptual and practical baggage that the HRAF might have carried along – its theoretical and methodological pedigree, inherent assumptions, and any links – institutional or personal – clinging to this instrument.

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The *Files* are in a way a co-authored publication – a product of the teamwork of the HRAF analysts<sup>[31]</sup> and the authors of the ethnographic texts. It is not only the research team associated with Yale who were behind their production and distribution, but also a consortium officially founded in 1949 that initially involved other US universities: Harvard and the Universities of Pennsylvania, Oklahoma and Washington.

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Tracing the history of HRAF, the anthropologist George Peter Murdock emerges as the driving force behind the whole enterprise. As Rebecca Lemov has noted in her book *World as Laboratory* (2006), Murdock was a Yale professor famous for his encyclopedic knowledge. In 1928, he started constructing a bibliography on the subject of various cultures around the world. After several years working alone, his project transformed into the collective endeavor that became the *Cross-Cultural Survey*. From 1935, Murdock’s team operated under the aegis of the Yale Institute of Human

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Relations, which saw it as suitable for their experimental and comparative social science research. It is particularly notable — and has already been discussed at length (see: Price 2012, 2016) — that the *Files* experienced their most intensive period of development during the Second World War. It was then that the project acquired the financial support of the military and US intelligence. It was a valuable operational instrument during the War and also later in Cold War imperialist policy, offering a rich source of systematic data that could easily be misused as intelligence information. Lévi-Strauss was almost certainly aware (at least to some extent) of the rather inglorious backstage of the HRAF development. He noted in interviews that it was created “on behalf of the United States government” [Lévi-Strauss and Eribon 1991, 63].

According to the handbook *Nature and Use of the HRAF Files* [Lagacé 1974], the files were initially intended as a tool for testing hypotheses (constructed on the basis of causal relations between variables) and hence would lead to the generation of a “valid theory in the social and behavioral sciences.” Exemplary questions posed by cross-cultural researchers could be: “Is there an association between most important subsistence activity and level of political complexity?” or “Why do some societies practice matrilineal residence and others patrilineal residence?” [Ember et al. 1998, 6]. Lagacé claims a certain “a-theoretical” nature of this apparatus, stating that the *Files* “constitute an organized collection of data, and they should be used to retrieve data, not theory” [Lagacé 1974, 15].

Looking for theoretical underpinnings of the HRAF, Rebecca Lemov inquired into Murdock’s education and any intellectual influences he might have been affected by – rejected by Franz Boas, he did his Ph.D. at Yale, studying under A. G. Keller in the tradition of W. G. Sumner (both associated with the evolutionism to which Boas was rather hostile). However, Lemov concludes that “the files were now neither Kellerian nor Boasian, but, increasingly, Murdockian” [Lemov 2012, 136]. This, on the one hand, could mean that he started to realize his own vision of anthropology as a part of the empirical behavioral sciences and connect the *Files* with a discourse of laboratory trials, calling the HRAF “a sort of social science laboratory” [Murdock 1950, 718]. On the other hand, he tended to present the HRAF as a merely auxiliary tool, reducing the time and effort needed to complete research by taking out “the leg work”, “all the routine unproductive labor” and freeing the researcher’s creativity [Murdock 1950, 719].

The HRAF-ers were well aware of the critical responses to that idea – Ford noted that it was seen as unnecessary “pampering” of scholars by, for instance, Alfred Kroeber [Ford 1970, 9]. This could seem not only needless, but, more importantly, undesirable for epistemic reasons. In their review of the HRAF, Clarke and Henige discuss reducing the chores like bibliographical survey and translation of sources: “we can ask, if only rhetorically here, whether the serious scholar should allow him or herself this particular luxury. That is, both the HRAF and electronic databases may well take too many decisions (as well as some work) away from the individual scholar, and it is indeed debatable whether this is, on balance, desirable” [Clarke and Henige 1985, 50].

## The *Files* and the LAS: refitting

In this section I examine on what levels the *Files* were compatible with the LAS’s research and what was its connection to Lévi-Strauss’s work. Did the HRAF afford structuralist studies? How was it put to use in Paris? Bruno Latour offered a fairly radical take on it, stating that “Lévi-Strauss’s theories of savages are an artifact of card indexing at the Collège de France” [Latour 2011, 20]. Putting aside Latour’s rhetorical emphasis, is the connection indeed so undeniable?

Like Murdock and his team at Yale, Lévi-Strauss appreciated the speed with which information could be searched for in the HRAF catalog. Based on his own empirical testing, i.e. using his own experience, Murdock claimed that using the files meant a text could be written in a little more than 24 hours rather than the 24 days that a standard search through a library would entail [Murdock 1950, 720]. Perhaps this is what Margaret Mead also had in mind when she criticized the Human Relations Area Files for being “instant anthropology, like instant coffee.”<sup>[32]</sup> It was both the unusual speed and reliance on second-hand, republished sources (which the HRAF-ers called simply “data”, as though it were stripped of context) that is targeted here. There is no hiding the fact that using the HRAF might provoke associations with an already at that time outdated “armchair anthropology”. Interestingly, a tool which was said to elevate a regular library to the next level in terms of its scope and ease could have interested Lévi-Strauss, who described himself as a “library man”, not necessarily too keen on prolonged fieldwork (see: Lévi-Strauss and Eribon 1991, 44).

The *Files*, conceived as a kind of laboratory by Murdock and called the “laboratory without walls” by librarians, as Clarke and Henige acknowledge [Clarke and Henige 1985, 47], embodied a narrative and aura of experimentation, tailored for the needs of the Laboratory of Social Anthropology. After all, the laboratory label was chosen by the LAS founder on purpose, and he was aware of the obvious connotations it carried.<sup>[33]</sup> His views on the relations between the natural, social and human sciences and the position of the latter are in fact quite compelling and by all means would deserve a more detailed investigation. Risking an oversimplification, one could say that Lévi-Strauss’s mindset was close to a nuanced form of scientism. While speaking about choosing a name for his center, he resorts to etymology, as if he tried to revisit the history of the lab as a strictly science domain, as well as nodding to the “hard” sciences, which he understands as “more advanced”:

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Some people were surprised that the term *laboratory* could be applied to a center for the human sciences. In adopting it, however, we did not follow a fashion nor were misled by appearances. According to the etymology, a laboratory is first of all a place where one works. And it suffices to enter ours to see that the methods of ethnological research today adopt a style that brings them closer to those of more advanced sectors. (cited in: (Belmont 2008, 62))

Elsewhere, he said: “We consider ourselves, rather, as artisans, laboriously bending over phenomena which are too small to excite human passions, but whose value comes from the fact they can, when grasped at this level, become the object of a rigorous knowledge” (cited in: Pace 1983, 5).

It is interesting to look into this metaphorical language of the lab (microscopes and lab benches that researchers bend over are only hinted at in the scene imagined in the latter quote) that Strauss drew on, constructing a conceptual image of his center.<sup>[34]</sup> Besides, the LAS – the first social science lab in the Collège – was not an only initiative so denominated. There was also the Laboratory of Graphics at the École des hautes études en sciences sociales (founded by Jacques Bertin, who created diagrams for *The Raw and the Cooked*).<sup>[35]</sup>

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Like a telescope or microscope, the HRAF perfectly fit Lévi-Strauss’s famous formula of conducting anthropology “from afar.” According to Lévi-Strauss, “the anthropologist is the astronomer of the social sciences: his task is to discover a meaning for configurations which, owing to their size and remoteness, are very different from those within the observer’s immediate purview” [Lévi-Strauss 1968, 378]. Indeed, locating hundreds of files on a single table or a collection of two million pages on the subject of three hundred cultures from around the world in metal drawers in one room offered a perfect example of zooming out in producing knowledge.

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Melvin Ember, who served as the HRAF president in 1987, promoted the *Files* by quoting a passage on laboratorial anthropology treating societies as “ready-made” experiments. The author of these words was none other than Claude Lévi-Strauss [Ember 1988]. In a text presenting the LAS, Lévi-Strauss used exactly the same terminology as the creators of HRAF: variables, positive and negative correlations, and the verification of hypotheses [Lévi-Strauss 1965a, 90]. However, elsewhere he mostly referred to it as “an enormous documentary tool” or “a bibliographical treasure” and he stressed: “the card index to the *Files*, which some people have unwisely denigrated, is above all a library” [Lévi-Strauss and Eribon 1991, 63, 77]. This actually proves that Lévi-Strauss treated this tool in a fairly traditional way.

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What puzzles me is the fact that despite all the praise, Lévi-Strauss hardly spoke of the *Files* as useful in his writing. Even while describing his work on the well-documented and abundant volumes of *Mythologies*, when he had to “comb through” all relevant ethnographic literature to distill myths, he never made use of the HRAF collection explicit.<sup>[36]</sup> It is possible, of course, that he had used it like a standard library and decided to cite only primary sources he retrieved, without acknowledging the tool itself (which seems also to be the case in the usage of today’s online repositories).

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Was HRAF widely used in the Parisian Laboratory? I was not able to determine it, but, according to Lévi-Strauss himself, some key figures like Raymond Aron, Gabriel Le Bras, Jacques Lacan and Pierre Bourdieu expressed interest in it (cited in: Loyer 2018, 385). Also, Simone de Beauvoir was said to consult the HRAF (see: Salerno 2004, 137). Regarding collaboration fostered by the HRAF, it appears that sharing infrastructure did not necessarily lead to working

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together.<sup>[37]</sup> The collection was rather used individually by scholars. Referring to an already mentioned account of the spatial constraints imposed on the LAS's members by the growing HRAF, we can observe that expansion of the *Files* led to shrinkage of office space and eventually resulted in adding partition walls, “especially under the Mansard roof, to create individual cubicles” [Lévi-Strauss and Eribon 1991, 77]. The sheer size of the HRAF was perhaps more likely to affect work habits and forms of sociality in the Laboratory (solidifying a perceived need for a solo studio, or a cubicle) rather than transform modes of doing research. Regarding affordances of the *Files* coming from their content and organization, they could have lent themselves to analyses undertaken by the LAS's researchers. Lévi-Strauss talks about collaborating with his colleagues (Lucien Sebag and Jean-Claude Gardin) on the mythology of Pueblos – preparing an inventory, “laying a myth on the table and analyzing it together” [Lévi-Strauss and Eribon 1991, 127] – maybe the *Files* could have been used for such purposes.<sup>[38]</sup>

Moreover, being a database-like tool, consisting of chunks of ethnographic texts as discrete units mapping different cultures and enabling manipulation and reconfiguration by the scholar, the HRAF could afford and at the same time epitomize “structuralist activity” defined by Roland Barthes as the “fabrication” of the world, which “involves two typical operations: dissection and articulation” [Barthes 1972, 216]. Barthes explains: “Structural man takes the real, decomposes it, then recomposes it; this appears to be little enough (which makes some say that the structuralist enterprise is ‘meaningless,’ ‘uninteresting,’ ‘useless,’ etc.)” [Barthes 1972, 215]. Interestingly, the very accusations were also made with regard to the *Files* (reportedly, Margaret Mead spoke of their “artlessness” – see Tobin 1990, 477).

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It should be noted here that the critique of the Human Relations Area Files – not uncommon then<sup>[39]</sup> – was expressed inside the LAS, too. Furthermore, it came from the chief expert on informatization, appreciated by Lévi-Strauss, Jean-Claude Gardin (who ran *Section d'Automatique documentaire* in CNRS). Gardin is recognized as a pioneer of archaeological computing. As early as in 1960 he published an article reviewing the HRAF in which he points out two main problems of this tool – on a practical level it is too expensive and cumbersome and on a theoretical level it imposes a rigid classification scheme and its categories are too broad to operationalize and lack cross-referencing (see: Gardin 1960). He also suggests that the HRAF could be opposed because of its aspirations to universality, or the “totalitarianism” of a general system. After a few critical remarks on the HRAF, Gardin elaborates on a different project in the making, undertaken in order to search through vast ethnographic literature by employing mechanical methods. The ethnographer in charge of this task had been Françoise Izard (later known as Héritier), who became Lévi-Strauss's successor.

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Yet another interesting critique that should be addressed here pertains to Murdock and his methods and dates back to 1952. The critic is Lévi-Strauss himself. While acknowledging Murdock's contribution to the study of social structure by “rejuvenating statistical methods” and “painstaking effort” in creating Cross-Cultural Survey (a.k.a. HRAF), he points out that the number of 250 cultures selected by Murdock as a sample for cross-cultural analyses is an “overindulgent estimate”, data is abstracted and the categories used in the scheme mirrored the traditional evolutionary anthropological theory rather than do justice to terms derived from the source material. It is also to be noted – Lévi-Strauss continues – that the method proves efficient mostly in a negative way (when used to scrutinize whether any alleged correlations are plausible). Finally, he states: “the reader here may easily verify that I take the greatest care to dissociate my conceptions from those of Radcliffe-Brown and Murdock”, adding that he never used statistical methods [Lévi-Strauss 1968, 306–324]. This is all rather serious methodological and theoretical critique, suggesting unambiguously that Lévi-Strauss was not willing to use the HRAF in the ways intended by Murdock. Perhaps that is why he “reduced” it to a rich bibliographical treasury, intending to repurpose it for his newly opened center as a well-equipped library of literature (in English, so probably less widely available in France). After all, having conducted research in the New York Public Library, he knew how useful it was since he touted this place as the bedrock of his expanded anthropological erudition.

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It would be interesting to examine what has become these days of the paper HRAF in the LAS. The paper version of HRAF today serves as something of a curiosity. It takes up a lot of space, although nobody uses it for research purposes, but a lot of people do like to take photos in front of it. It is reminiscent of the categories coined by Anke te Heesen writing about a type of furniture – the cabinet or cupboard – and its role in making academic knowledge. The author distinguished several subcategories, one of them being *Ordnungsmöbel*, enabling storing and sorting and the

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other one *Representationmöbel*, which is for example a decorative old cabinet, usually emptied and put in the rector's office as a nostalgic representative of the great many years of tradition [Heesen 2007]. Although HRAF drawers are not empty and materials still can be consulted (by appointment), the paper files do not really serve as a go-to library resource, but rather an index of the fascinating origins and adventures of the Laboratory. It is worth asking whether structural anthropology might have shared the fate of the HRAF: has it become to some degree a museum piece?

Traversing through the reception of structuralism and the legacy of the Laboratory in today's anthropology is beyond the scope of this paper. Notwithstanding, I would like to mention Paul Rabinow's critique of the LAS. As he has noted, despite its significant achievements in fostering a collective mode of research, LAS has not stood the test of time, failing to adapt its methods to changing realities and solidifying a hierarchical structure perpetuated by Lévi-Strauss' personal charisma [Rabinow 2006]. Rabinow, Collier and Lakoff are also critical of the *Files* and their claims to universality [Collier et al. 2006]. What is worth noting, though, is that Rabinow and his colleagues have advocated for anthropological laboratories and have founded one themselves. In their blueprint for the lab, infrastructure is recognized as meaningful, no mimicry of the natural science is intended and the most important role is occupied by "rigorous" concept work (based on collective agreement).<sup>[40]</sup>

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## Conclusions

This study is a contribution to the archaeology of the humanities laboratory approached from an infrastructure and media angle. My goal was to shed more light on the significance of infrastructure in the analog humanities' lab by focusing on the case of the *Laboratoire d'anthropologie sociale* founded in 1960 and directed (till 1982) by Claude Lévi-Strauss. Drawing on the literature from the field of humanities infrastructure and research infrastructure as well as other seminal works in critical infrastructure studies, I have shown how the Laboratory was organized around the Human Relations Area Files. They played an important role in seeking funds and space and – considered as valuable and rare resources – were used to gain infrastructural advantage (based on their paper-ness) and helped to position the LAS as "richly endowed". I suggest that it may be partly due to these pragmatic reasons – recognized as not epistemically related or valid – that the Laboratory has not had any important place in the readings of Lévi-Strauss's work.

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Moreover, the LAS has not been (yet) rediscovered by the movement towards the humanities labs which we are observing in the present day. We could be tempted to see Lévi-Strauss as a proto-digital humanist (or the humanities' computing fellow), given his interest in applying computers and new means of documentation to anthropological research. In fact, he rather adhered to more old-fashioned, "makeshift" methods (as admitted in: Lévi-Strauss and Eribon 1991, 138). Meanwhile, he observed – not without great interest – how others in his Laboratory were figuring out how to benefit from computing in the anthropology of kinship.<sup>[41]</sup>

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What this paper also highlights, is a significant load of immaterial academic "care work", which means here taking care of (re)sources and (re)locations. Lévi-Strauss appears to be a skillful administrator, fundraiser, facilitator of teaching and publishing platforms and a vocal advocate for the human sciences (despite the scientism he may have subscribed to). He was able to coordinate the LAS's activities with French state-driven research programs, taking advantage of new higher education policies in the 1960s and 1970s. Caring for the LAS' material conditions (i. e., maintaining its costly and burdensome HRAF collection) was, though, a team effort. Refocusing my history of this lab on the "hidden figures" (who contributed greatly to the actual quotidian work of the research institution, failing to be fully acknowledged) seems worthy of exploration and would entail seeking additional source materials.

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Lastly, I also examined the place of the *Files* in the Laboratory of Social Anthropology in terms of their mutual or contradictory research goals and methods and theoretical underpinnings. Considering how the HRAF contributed to the situatedness of the lab, I elucidated its "imported" character and possible implications thereof. I argued that although maintaining this enormous collection influenced the organization of the physical premises of the LAS, it apparently did not alter in a significant way the modes of study (neither did it start intensive research collaborations within the lab, which is sometimes believed to result from sharing infrastructure). It could be said that the HRAF used by Strauss and his Laboratory took on various functions, ranging from boosting the sense of excellence and exclusivity, through being a rhetorical tool in discourse on modernization of the human sciences and experimental anthropology, to even being a

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bargaining chip in negotiation for a bigger locale. In several respects the *Files* were compatible with research agenda in the Laboratory of Social Anthropology and with its founder's own proclivities, constituting a repository of "ready-made experiments" and lending themselves to structuralist "dissection and articulation". However, it is more likely that *Files* in the LAS were actually tailored for its specific (infrastructural) needs and used more traditionally than was intended by their creators – not as a machine for drawing statistical correlations, but rather an efficient library catalog. Through the "infrastructural inversion" it all comes into focus, proving how seemingly prosaic arrangements tend to be epistemically laden.

Continuing this study will need to pick up some loose threads and engage with the materiality of knowledge production in the LAS. Further research could usefully explore topics such as Lévi-Strauss's strong inclination to experiments performed with the help of models and mobiles (made from paper and wires and hanging from the ceiling in the Laboratory) and all the "handiwork" invested in modelling, which he conceived – contrary to common belief – as the work of an engineer rather than a bricoleur.

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## Notes

[1] [https://hraf.yale.edu/wp-content/uploads/2015/01/HRAF\\_Paper\\_Microfiche\\_Files.pdf](https://hraf.yale.edu/wp-content/uploads/2015/01/HRAF_Paper_Microfiche_Files.pdf).

[2] The Laboratory of Social Anthropology is one of the case studies we chose to investigate in the project (alongside, for instance, Aby Warburg's Kulturwissenschaftliche Bibliothek, Paul Otlet's Mundaneum and Jerzy Grotowski's Laboratory Theatre). Furthermore, we inquire into alchemy cabinets and the cabinets of curiosities as possible pre-figurations of the humanities lab. We presented preliminary findings of this study in a joint paper "From the Archaeology of the Humanities Lab: A Tricky Case of Claude Lévi-Strauss's *Laboratoire d'anthropologie sociale*" at the conference *Making of the Humanities VII* (15-18 November 2018, University of Amsterdam). Expanding on that research, this paper goes into further detail about the significance of infrastructure in the LAS.

[3] A growing interest in the humanities labs (their early forms as well as their infrastructural side) has been shared by several scholars – e.g. Lori Emerson, Jussi Parikka and Darren Wershler in their forthcoming publication *The Lab Book: Situated Practices in Media Studies* (the project website: <https://manifold.umn.edu/projects/the-lab-book>) and Steven E. Jones in his recent work on reconstructing Roberto Busa's lab (see: Jones 2018 and the collaborative project website: <http://www.recaal.org/>). The arguments historicizing the current *lab fever*, which are similar to our assumptions, have also been made by Grant Wythoff (2018). Other recent works pertaining to the history of the laboratory in the humanities concentrate on the nineteenth century German philological seminars (see: Spoerhase 2019) and the interwar laboratory operating at the intersection of applied linguistics and acoustics (see: Tkaczyk 2019). While the focus of many existing works covering this subject is mostly technical and/or design laboratories of various kinds (media labs, digital humanities labs, fablabs, hacklabs, etc.), our project looks into the cases which would not fall into these categories or may not have been otherwise entangled with media studies or other kindred fields. Thus, the proposed framework of the project, aiming to address the question of the laboratory in the humanistic scholarship conceived more broadly, is complementary to the already mentioned studies. Such a general (and perhaps inescapably vague) conceptualization of the humanities would mean that we have a predilection for an interpretive, qualitative approach, straddling various theoretical and methodological orientations, and we tend to emphasize the humanities' specificity in regard to the natural and social sciences. However, when looking for the historical instances of

the lab we are interested in different disciplines, methods and styles of inquiry – vide this paper discussing the laboratory of structural anthropology which – due to its analytical, anti-historical orientation – could be sometimes contrasted with what is traditionally recognized as humanistic knowledge, especially when one takes into consideration the used nomenclature and national conventions – e.g. distinguishing between the *human sciences* and the *humanities*.

[4] It could be rightfully argued that searching for precursors does not fit a style of analyses inspired by Michel Foucault's archaeology of knowledge with its disregard for genesis, continuity and totalization. Therefore, we should be cautious when conceptualizing the status of the LAS and choosing terminology. As stated in the dictionaries, "precursor" and "forerunner" are by and large used as synonyms, although "precursor" connotes not only something happening or existing before another thing, but also a person or thing paving the way for the other's future accomplishments. Together with Małczyński and Wolska I opted for "prefiguration", assuming that – being less common and slightly less burdened with teleological thinking – it would be a safer choice.

[5] The author is not explicit about any dates. We could gather that this period spans across the second half of the nineteenth century and the twentieth century. It would be better, though, not to determine when it definitely ends, as if it gave up to the digital era. Sterne is careful not to draw a line here, stressing that the digital devices operate on the layers of the analog technologies or have analog components. Although we are inclined to contrast the analog with the digital, we could also shift the focus to their points of contact. To further complicate the matter, one shall bear in mind a semantic vagueness of these terms. As evidence by numerous lexicon entries and articles, there are various ways of defining the analog and the digital – some definitions foreground technical conditions (continuity vs discontinuity of the signal), while the others focus more on their cultural and affective attributes (analog being closer to nature and human senses, triggering nostalgia, etc.) or even on a deeper philosophical sense (see: Buckley 2014, Cramer 2015, Galloway 2014, Schrey 2014, Robinson 2008).

[6] My grappling with the idea of the analog humanities seen as a periodization tool is in line with the critique of using media as temporal markers presented by Cox (2015) and Gitelman (2010).

[7] It is worth mentioning that in the literature we can find other terms intended to capture earlier technological conditions of the scholarship, for example *print-based humanities* (see: Hayles 2012 and Hayles and Pressman 2013) and *print humanities* (see: Mandell 2015). The scope of the analog humanities would be more limited, but the print remains essential also in this media environment (and so does paper).

[8] The analog, the digital and the post-digital would describe specific historical worlds of experiencing media. As Berry and Dieter state, the post-digital signifies the most recent moment, characterized by "immersive, disorientating experiences of computational infrastructures as they scale up and intensify" [Berry and Dieter 2015]. On the other hand, regarding the present time (and the near future), the authors discourage us from delineating the digital and the non-digital, arguing that such distinctions become nonsensical (as the digital is being seamlessly interwoven in our daily lives).

[9] The last component of this verbal snapshot is perhaps less surprising if one recalls a figure of speech, which Lévi-Strauss seemed to be fond of, positioning anthropology as the astronomy of the social sciences.

[10] Another example I have been studying is the use of scholarly index cards, especially in the context of cultural studies in Poland – the first department of cultural studies was formally founded in 1972 by Stanisław Pietraszko, whose collection of cards I have been analyzing in my dissertation. See: Kil 2017.

[11] My discussion of the analog humanities lab presented above is in fact framed in a media archaeological perspective, in which insights of past and often obsolete technologies inform our understanding of the contemporary media age and vice versa. Media archaeology foregrounds the materiality of scholarly work, revisiting old and purportedly discarded technologies of intellectual labour (such as the HRAF in both paper and microfiches form) and avoids viewing technological change in terms of imminent progress. The proposed archaeology of the humanities infrastructure also alludes to a Foucauldian sense of *archaeology*, repurposed by media scholars (e.g. F. Kittler), and seen here as an analysis of the (techno-cultural) conditions of knowledge. Media archaeology does not form a unified field or discipline, being perhaps rather a style or aesthetics of the historical reflection on media and cultural techniques (for a synthesizing account see: Parikka 2012). The most stimulating for my thinking have been works and ideas by Lori Emerson, Errki Huhtamo, Markus Krajewski, Jussi Parikka, and Siegfried Zielinski.

[12] The body of research within the purview of critical infrastructure studies have been growing, as evidenced by an extensive bibliography curated by Alan Liu, which can be found online: <https://cistudies.org/critical-infrastructures-bibliography/>. Critical infrastructure studies encompass many different approaches to infrastructure (informed by the science and technology studies, ethnography, media studies, digital humanities, art and design, etc.). They also seem to include a narrower field of studies dealing with research infrastructure or – even more precisely, humanities infrastructure, seen as a more domain-specific type of infrastructure, devoted specifically to enable research and used within the scholarly communities. Different, yet overlapping, terms exist in the literature – namely: research infrastructure (see: Anderson 2013),

knowledge infrastructure (see: Bowker 2017), scholarly (information) infrastructure (see: Borgman 2007), academic infrastructure (preferred by Svensson as the one carrying fewer connotations with science – see: Svensson 2016). I find it fruitful not to reduce the complexity evidenced by this rich terminology and mesh together the insights coming from these different approaches. As far as the humanities are concerned, although it could be useful to grasp specificity of specialized facilities, tools, resources, institutions and standards supporting research in the humanities, in some cases we may as well resort to a more generic understanding of infrastructure (bearing in mind that research infrastructures tend to be layered upon or entangled with other kinds of substrates). Svensson also argues for a rather broad understanding: “With an inclusive definition of research infrastructure, almost anything needed to carry out research in the humanities could be included: ranging from paper, pens, books, furniture and people to database structures, grid computing facilities, visualization centers and libraries” [Svensson 2011]. Additionally, it will be discussed further in the paper that the HRAF is in fact illustrative of the porous boundaries between the concept of research infrastructure associated with science and engineering (and often understood as infrastructure tout court) and the humanities infrastructure.

[13] A relational character of infrastructure (put forward in a canonical work by Star and Ruhleder (1996) and eagerly adopted by others) is understood as an emphasis on *when*, not *what* is infrastructure. For Star and Ruhleder that means infrastructure is always embedded in organized practice. Interestingly, relationality entrenched in the concept could also be seen in the origins of the word – according to Carse (2017, 29), in the language of the late nineteenth century’s French engineering, infrastructure primarily referred to construction work done prior to laying road tracks and also the very road beds beneath the tracks. Thus rails, trains and train stations – which we commonly imagine as emblematic *infra*structure – actually used to serve as *super*structure in relation to what was done to make these projects happen.

[14] A notable exception could be a recently translated biography by Loyer (2018), whose meticulous archival and ethnographic work provides valuable insights into the LAS’s history and allows for the behind-the-scenes view (presented in the chapter “The Manufacture of Science”). To her work I owe my deepened knowledge of the LAS’s functioning. Other relevant sources include mainly interviews with Lévi-Strauss, his own writings as well as memoirs and occasional materials published by the LAS.

[15] What I mean here is that the idea of laboratory could have lost traction in the anthropological meta-discourse due to a growing impact of phenomenology and hermeneutics and after the interpretive turn. The latter is exemplified by Clifford Geertz. In his influential “Thick description” (in *The Interpretation of Cultures*) published in 1973, Geertz remained antagonistic to such a mode of scholarship in which anthropologists construct models, study cultures as if they were “natural experiments” and adopt a concept of the “natural laboratory”; “what kind of a laboratory is it where *none* of the parameters are manipulable?” – asked Geertz provocatively [Geertz 1973, 319], polemically alluding to the structuralist anthropology. For a further discussion on the competing visions of anthropological research (the one aligning itself with social science and the other oriented towards the humanistic interpretation) and the resulting perception of the HRAF see: Tobin 1990.

[16] HRAF is a membership-based research agency, based at Yale but financially independent and not-for-profit. According to a report from 2000, member dues were considered to be too high for many academic institutions to be willing to join it (see: Ember and Human Relations Area Files 2000).

[17] Starting as a single project based at the Yale Institute of Human Relations, in 1949 the HRAF, Inc. became an interuniversity research consortium with five founding members. Now there are over 400 institutions (such as universities, libraries, museums, etc.) with access to the *Files*.

[18] They can be accessed here: <http://hraf.yale.edu/products/> (free trials of both databases are also being offered).

[19] The first mention of Murdock and his *Cross-Cultural Survey* (which later became the HRAF) I found in a paper delivered by Lévi-Strauss as early as in 1952 and later published in his *Structural anthropology* [Lévi-Strauss 1968, 306].

[20] We could ponder on the possible ramifications of this “imported” nature of the *Files*, produced (selected and annotated) in the United States and used at a French academic institution. For instance, could it be an issue that all texts collected in the HRAF index – aiming at representing “the world cultures” – were in English (some being translated from other languages, also from French, but reportedly original versions were also filed)? Could the Anglo-American pedigree of the tool have invited criticism (if we bear in mind the situation of the social sciences in post-war France described by Loyer – they are said to have been underfunded, supported by UNESCO and frowned upon by the Marxist left, who “looked very unfavorably on these ‘American’ sciences of capitalist social engineering” [Loyer 2018, 380])? Or perhaps contrariwise, could it have been seen as a positive sign of international academic cooperation or even a welcome “gift” from a scientific community of the country which sheltered numerous French exiles, Lévi-Strauss included, during the war?

[21] As Geoffrey Rockwell (2010) observes, one of the inherent problems of infrastructure is that it has to be maintained.

[22] For this clue I am thankful to Professor Wiktor Stoczkowski who shared his insights into the history of the LAS with my colleagues and me



during his visit at the University of Wrocław (personal communication, May 2018).

[23] When located on Avenue d'Éléna, Isac Chiva mentioned that the laboratory's secretarial staff (typewriters, receptionists, "people in charge of accounting, mail, library resources and archiving") used to work together in another office (cited in: Loyer 2018, 386). They could have been all located in the second larger room (where the HRAF was stored).

[24] This reference to a potentially better equipped American research team appears only in the version of *The Structural Study of Myth* published in 1955 in *The Journal of American Folklore* – its later version published in French as a chapter of *Anthropologie structurale* lacks such a statement.

[25] Reporting on how new higher education policies – oriented toward "modernization" and triggering influx of money for social sciences – in Gaullist France had shaped the research agenda of the LAS, Loyer touches on several state-sponsored projects in the 1960s and 1970s joined by members of the Laboratory. One example is the interdisciplinary, collective and multiyear study on Plozévet, a French village in Brittany, where the LAS researchers conducted anthropology of the contemporary rural communities. Loyer points out that Lévi-Strauss was not personally too keen on such research (mostly for methodological reasons), nonetheless he grasped these fieldwork missions as strategically important means of bringing in funds, creating new posts as well as gaining recognition for the consolidating discipline. See: Loyer 2018, 380–383.

[26] He might have learnt this from Roman Jakobson, a friend and mentor during his American years, who was also knowledgeable when it comes to obtaining funds and promoting his research to collaborators in the US, especially when structuralism went hand in hand with and flourished because of cybernetics. More on this topic – see: Geoghegan 2011.

[27] The *Files* act here as both sources (they were advertised as a collection of primary source materials) and – from an infrastructural perspective – resources, understood as a "reserve on which one can draw when necessary" – Christine L. Borgman suggests these terms tend to be conflated, but in this case both seem applicable, underlining different aspects of the HRAF [Borgman 2007, 121–122].

[28] As Antonijević, Dormans and Wyatt note, one should not overlook various instances of academic carelessness (mistreating colleagues, data, texts and sources) [Antonijević et al. 2013, 66]. Along with the memoirs of former members of the LAS (later Lévi-Strauss's successors in the role of director) such as Descola and Nathan Wachtel, who recall a friendly, hardly doctrinaire atmosphere and a collective spirit [Zonabend et al. 2010, 11–13], one should also consider any signs of friction or even animosity (not to be found in the occasional official publications of the Laboratory) – e.g. Lévi-Strauss mentioned the split with Robert Jaulin who had left the LAS as a result of personal differences ("we quickly separated because we were incompatible" [Lévi-Strauss and Eribon 1991, 154]) and he commented on disputes related to the events of May 1968, speaking of the LAS' feminist-oriented researchers who "got stirred up and were asked to leave the laboratory" [Lévi-Strauss and Eribon 1991, 79].

[29] He could have not disposed of this "secretarial help" after he had retired as the LAS' director – his secretarial work was taken care of by Eva Kempinski, who – as stated by Strauss and Eribon in the Prologue to the interview – "in addition to typing the manuscript, did so much to organize a transcription laden with additions, deletions, and corrections" [Lévi-Strauss and Eribon 1991, viii].

[30] As we read in Loyer's biography, an initial (but already fully-fledged) idea of the Laboratoire d'anthropologie sociale was born in 1949, when Lévi-Strauss first applied (with no success, though) to the Collège de France. According to Loyer, he had known that the Collège was "a golden prison" and its professors had no research teams and doctoral students to supervise. That is why he wanted to create a research center connected to his chair and a journal of international reach (*L'Homme*, managed by Jean Pouillon, his close collaborator and a key figure in the LAS). "The research center and journal were the long arms of the new position," writes Loyer [Loyer 2018, 354].

[31] The people behind the HRAF production did not form a unified group. It is worth mentioning Lemov's account of this process: "They hired two strata of data 'processors' - a team of graduate students and their wives to go through texts and mark the targeted information and an auxiliary team of typists and office workers to do the clerical work of typing and filing" [Lemov 2012, 133]. Cf. Jones (2018) pointing out the gendered and hierarchical data processing at the Busa's lab.

[32] Mead's opinion was cited by Isac Chiva in his text "Une communauté de solitaires: le Laboratoire d'anthropologie sociale" [Chiva 2004], but with no direct source attribution.

[33] Given Lévi-Strauss' scientific ambitions, one could argue that it is possible to consider LAS an imitation of a scientific laboratory and not a fully-fledged human sciences (let alone "humanities") institution. Of course, any clear-cut answers would depend both on the definition of the humanities applied and the academic tradition (which, for example, deploy different names, such as the "human sciences" and "humanities") used to contextualize the argument. If we consider that the LAS is an example of the "scientification" of the humanities, we should be cognizant

of the conditions of this process which may be not be symmetrical to what is happening in today's scholarship. On the contemporary "scientification" of the humanities in relation to the laboratory see: [Pawlicka 2017].

[34] It is not only language making up a picturesque image of the lab. This metaphor could also materialize in a physical form – consider Lévi-Strauss's awe and fascination with a former geology lab, in which buildings he installed the LAS (Place Marcelin-Berthelot). He marveled at its mahogany cabinets storing mineral collections, elegant, sturdy furniture and aura of the mid-nineteenth century laboratory. He said affectionately: "Nowhere else, I thought, would I rather spend my days than in these spacious, silent, and secret rooms" [Lévi-Strauss and Eribon 1991, 76]. I would argue that we could think of these spaces as *epistemic surroundings*, which Mario Wimmer describes as places where one could think with what is at hand and these spatial arrangements shape the very process of thinking. He writes on the "material concepts" and is interested in how they contribute to knowing on a more unconscious level: "My basic assumption is that this surplus of meaning is an effect of both the excess of the materiality of language, as well as the experience that emerges in the process of research but which cannot be translated into scholarly discourse and thus enters, in its symbolic-material form, the epistemic surroundings where it acquires a latent existence" [Wimmer 2017, 251]. Was the laboratory a material concept in Lévi-Strauss' thinking?

[35] As for the laboratorial Zeitgeist and the origins of the idea for the LAS, it is rather unclear whether Lévi-Strauss's lab was inspired by the American cybernetics centers like MIT's CENIS and Research Laboratory of Electronics which Strauss was familiar with and even engaged in some cooperation. As documented in his letters to Jakobson, in the early 1950s Lévi-Strauss sought funding in the US to open in France a center for structuralist analysis undergirded by cybernetics. As discussed by Geoghegan and Loyer, it is not probable that the LAS was a direct realization of these plans.

[36] Jason Pribilsky interpreted a famous cartoon by Maurice Henry depicting the great French intellectuals – Foucault, Derrida, Barthes and Lévi-Strauss, with his nose in papers – asking a question (of a rather rhetorical nature) if Strauss was actually "lost in the pages of Human Relations Area Files" [Pribilsky 2016, 11]. My tentative answer to such a question would be that he probably wasn't or at least he would not have seen it as reading the HRAF, but instead the ethnographic reports deposited there.

[37] The ideas of sharing and collaboration are entwined in the definitions of infrastructure promoted by e-Science programs (and imported to the humanities as well) – see: Anderson and Blanke 2012, 153.

[38] But such collaboration did not result in co-authored publications. Speaking of collective work, Lévi-Strauss pointed to his seminar: "our weekly seminar can become the meeting place for a team whose members, already united by other ties, can thus keep each other informed of their individual work. It goes without saying that this collaboration supposes a certain unity of views, without, however, excluding a doctrinal independence. The unity results from the fact that whether to get inspiration or to combat them, the participants readily take as terms of reference the ideas that we, ourselves, continue to develop in both our lectures at the Collège and the discussions - often very lively - which occupy the last part of each seminar" [Lévi-Strauss 1983, 63].

[39] Actually, reconstructing the critical arguments against the *Files* and analyzing how they changed throughout the years would be of value. I would just like to point to Joseph Tobin's interesting piece "The HRAF as Radical Text?" (1990), which is a truly tongue-in-cheek interpretation of the *Files* as reactionary in a political and also epistemological sense, but stylistically radical. Tobin shows that in the course of the interpretive turn in anthropology (after *Writing Culture*), HRAF was dismissed as uncool, dull and falsely scientific. But even before there were considerable objections to it voiced by British anthropologists. Tobin argues it shows a transatlantic rift between visions of how anthropological theory should be built. What was artless "tabulated nonsense" for Edmund Leach (Cambridge), remains a valid behavioral sciences theory created by analyzing causal relationships between variables for his American colleagues using Cross-Cultural Survey and disapproving British anthropology for being "overwhelmingly humanistic", descriptive and intuitive (cited in: Tobin 1990, 478).

[40] Rabinow et al. founded the Laboratory for the Anthropology of the Contemporary (LAC). A striking resemblance to the LAS is most certainly unintentional here, but the idea provokes us to think of the similarities and dissimilarities between the two endeavors. What is worth mentioning, Rabinow's drive to the "laboratory of the interpretive human sciences" comes from dissatisfaction with the individual project as the dominant mode of knowledge production.

[41] More on these early attempts at computerizing anthropology in the LAS can be found in: Zonabend et al. 2010, 36-37 and Lévi-Strauss 1965b. Also, Loyer writes that since 1967 the LAS could share an SDS 9300 computer with a nuclear physics laboratory at the Collège (she also claims that the LAS was marked by a rather naïve enthusiasm for computers) [Loyer 2018, 401]. This allows us to say that the computer in Lévi-Straussian thinking was not just imagined, as Seaver claims [Seaver 2014], but actually quite real.

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