

Supplementary Information_1

Scientific Analysis and Preservation Protocols for Tattooed Skin Specimens from the "Luigi Cattaneo" Anatomical Wax Collection by Vadrucchi et al.

This document constitutes the supplementary information for the manuscript "Perspectives on Tattoos: From Cultural Symbolism to Scientific Analysis". It offers a fascinating exploration of a historical audio recording from 1964-1965, preserved at the Museum of Civilisations in Rome, which documents the practice of religious tattoos in Italy. Through interviews conducted by Don Nicola Jobbi, a parish priest and ethnographic researcher, the rich tradition of devotional tattoos linked to pilgrimages is revealed, particularly those of the Madonna of Loreto and Saint Gabriel.

This unique sound artefact not only preserves first-hand testimony of a cultural practice that has now almost disappeared but also offers valuable reflections on the moral, social, and religious aspects of tattooing in post-war Italy. The document represents an important contribution to understanding the evolution of tattooing from a devotional and identity practice to a contemporary art form, illuminating a little-known chapter of Italian cultural history.

Anatomy of an Audiotape. Sound Recordings about Tattoos by Don Nicola Jobbi (1964-1965)

Francesco Aquilanti - Museo delle Civiltà (MUCIV) in Rome

In the sound archive of the former National Museum of Arts and Popular Traditions in Rome, now the Museum of Civilisations, a magnetic tape is preserved with inventory number 108686. It is a small 12 cm reel of the Soundcraft Magnetic Recording brand, ¼" open reel, normally used for audio recordings during the sixties and up to the eighties, when this format was replaced by more practical audio cassettes.

Some indications clarify the content of the recording contained in the small tape: *Lato A - mono. Tatuaggi - Madonna di Loreto - registrazioni di Don Nicola Jobbi - Abruzzo, Cerqueto, frazione di Adriano (TE) - Anno 1964.* The content of the tape, recorded exactly sixty years ago and now digitised by the Central Institute for Intangible Heritage, has a total duration of 29'22" and is divided into four distinct sections. It could be a master copy of a home editing job, machine-to-machine, consisting of the transfer onto a single tape of different audio recorded on other media at different times and in different circumstances. This is also suggested by the rich soundscape that creeps in the background (cable noises, distant and imprecise echoes of a surrounding space, clearly domestic) and by the echo of a radio news report that has insinuated itself into the recording. Interestingly enough, the date of the recording is indisputable: 26 May 1965, when you can hear the distant voice of a radio commentator describing the trip of the then President of the Italian Republic, Giuseppe Saragat, to Friuli to attend some military exercises.

But “the anatomy of an audiotape” goes much further and deeper than this technical description. It is a truly unique and beautiful audio document, collecting first-hand testimonies with an unaltered, living “patina”, which takes us back to those places, those times, those dialects and all those cultural

and religious circumstances that surround the practice of tattooing with motivations very different from how we might understand them now.

First of all, the distinctive figure of Don Nicola Jobbi, born in Mosciano Sant'Angelo in 1934, stands out. He is the creator of these recordings, a parish priest in a small village in the Teramo area, where he founded the first ethnographic museum in Abruzzo in 1964. Don Nicola Jobbi, in addition to being a parish priest, was in fact a researcher who dedicated much of his life to documenting and enhancing the cultural and sound traditions of the central Apennines. His activities led him to collect a vast archive of ethnographic and sound materials, and his research was directly supported at the beginning by Annabella Rossi, anthropologist at the National Museum of Popular Arts and Traditions, and by the ethnomusicologist Roberto Leydi. After his ordination in 1963, Don Nicola moved immediately to the small mountain town, at the foot of the Gran Sasso d'Italia. Here he began to collect documentation of all kinds regarding the popular traditions of the community of the small village and the neighbouring mountain localities, working with all the technologies available at the time (photography, audio and video recordings, projections, and every type of machinery) to document the music and oral traditions of these communities destined to a rapid transformation of their ancient and stratified peasant and pastoral culture. This investigation of tattooing is among his first recordings made precisely between 1964 and 1965.

Let us enter the sound document.

The first track. After a series of noises and commotion, the voice of Don Nicola himself introduces us to the commander of the Carabinieri station of Fano Adriatico, to whom he asks for some information on the tattoo as far as the judicial police are concerned. The Commander explains, in a precise, formal and slightly redundant language that brings us back exactly to the image of those State garrisons in the Italian provinces immediately after the Second World War, that the tattoo constitutes a salient sign useful for descriptive signalling and personal identification. The commander then goes into detail in the description of the tattoo, describing it as an artificial colouring of the skin produced by coloured substances that have penetrated the skin tissue, and divides it into two macrocategories: accidental or voluntary. Among the accidental ones, he identifies the penetration of unburned powders following a short-range gunshot, the so-called "sting-blank", or more commonly as "professional" signs due to the subcutaneous infiltration of powders from work materials used by blacksmiths, stonecutters, coalmen, and miners. Our commander then ventures into the description of the so-called voluntary tattoos, which he defines as, almost always, "ornamental". The long analysis of tattoos then continues by indicating the exhibition of strong identity and resistance to pain in the individual recognition of "criminals". The analysis of tattoo features made with insoluble colouring substances such as India ink, lampblack, cinnabar, brick dust, etc. and which in court were indicated as significant for the criminal recognition particularly depending on the location of the tattoo, the shape, the size, the colour.

Then, there is an accurate description of the motivations and types of tattoos: tattoos related to the way of thinking, of feeling, ethnic, emotional, political, patriotic, criminal, religious, erotic, and symbolic tattoos. A large space is given to the criminal value of tattoos and their symbolic code, consolidating the sense of mystery and transgression linked to this form of body decoration by resorting to examples and categories of Lombrosian memory. The interview concluded by admitting, however, that neither the tattoo artist nor the beneficiary incurs in any provision of law that in any

way prohibits their creation; indeed, it evokes the seaside cities and large Italian ports (Naples, Genoa, Ancona, Venice and Trieste), where premises suitable for this purpose are prominently displayed.

The last part of the interview is dedicated to the religious tattoos of Loreto, a centuries-old tradition linked to the Marian sanctuary, involving the tattooing of an image of the Madonna, or religious or Christological symbols on the arm, as a testimony of the pilgrimage. Don Nicola asks the commander the reason why this practice has been carried out in secret since the mid-19th century and appears substantially prohibited. The commander cuts him short: this is not a provision of law but rather to the artful creation by the tattoo artist of a prohibitive and mysterious aura aimed exclusively at gaining maximum profit from his work.

Related to the last part of the first interview, about the singular theme of religious tattoos of the pilgrimage to Loreto, Don Nicola Jobbi presents the second interview, perhaps the most singular, conducted in Mosciano Sant' Angelo with Cristina Picchinelli, an eighty-five-year-old woman (born around 1879). Speaking a strong dialect, she talks about her trip to Loreto on the occasion of the celebration of December 10th. The trip with a cart pulled by a horse lasted three days. Don Nicola asks about her impressions of the celebration and the people who were present in Loreto, but then immediately focuses on the core of his interest: the tattoo. He asks for direct information: How and where was it done? The interviewee, motioning to show him the tattoo, says that she did it in a private home. She explains to Don Nicola, in a narrow and incomprehensible dialect, that a man had been proposed to her by someone in the middle of the street and that to do it, the man pressed a 'mould' with the image of the Madonna on her arm, stretched her skin and began to prick with needles. Once the work was finished, he put the image on top again with black ink so that it would remain forever. Don Nicola emphasises that the tattoo bears the year 1895 and is very pretty. It was not a particularly painful operation and cost 10 cents, says Cristina Picchinelli, answering the parish priest's precise questions. Everyone who had gone on a pilgrimage with her had gotten a tattoo, except the youngest. When asked about the reason for this tattoo, she answers with charming candor that it was a way, once back home, to show everyone that the pilgrimage had taken place.

The former National Museum of Popular Arts and Traditions preserves in the collections now merged into the Museum of Civilisations, "three hundred and thirty-seven" of these Loreto boxwood moulds, acquired mostly from a disused barber shop in Loreto at the beginning of the twentieth century (Fig. S1_1). Many of these *clichés*, together with a reconstruction featuring traditional costumes for the execution of a tattoo as a promise of marriage, were already exposed in the exhibition of Italian ethnography curated by Lamberto Loria at the Rome Exhibition of 1911, an exhibition that celebrated the fiftieth anniversary of the Unification of Italy.



Fig. S1_1: Original wooden cliché with religious themes from the collection of the National Museum of Popular Arts and Traditions preserved in the collections now merged into the Museum of Civilisations of Rome. A: Virgin Mary; B: ostensory; C: Sacred Heart of Jesus; D: Madonna of Loreto.

The wooden moulds were later also exposed during a second exhibition curated by Annabella Rossi at the National Museum of Popular Arts and Traditions, *Tattoos in Loreto and in Ciociaria (1 July - 1 September 1965)*. A letter dated March 13, 1965, from Annabella Rossi to Don Nicola Jobbi, preserved at the Centro Studi Don Nicola Jobbi/Biblioteca Melchiorre Dèlfico, in which reference is made to the request for photographs of tattoos and "of people with tattoos from the Sanctuary of San Gabriele". The same letter mentions a tape recorded by the parish priest, which the Roman anthropologist judged to be "extremely beautiful" and which was being transferred to Milan by Roberto Leydi, described in the typewritten letter on the Museum's letterhead as an "expert in popular music". It could be our tape or one of the many recordings of popular music made by Don Nicola. We will perhaps never know, but it is certain that the reference to the tattoos of San Gabriele takes us straight to the third of the interviews.

The third interview opens up a new scenario compared to the previous. We are in Teramo with Pierino Ferroni, born in 1916 in Mosciano Sant' Angelo. This time the tattoo represents San Gabriele and the interviewee says that it was done in 1941. The story told by the protagonist is simple and curious. He had given a friend a cigarette case, a 'snap-on' one, he specifies. In exchange, the friend offered to give him a tattoo. He chose San Gabriele because it was the day of the Ascension particularly celebrated in Colle Pietra (fraction of the Municipality of Mosciano where he was born). But the description of the context reveals another aspect of the story: he reports it was a memory of his imprisonment in Bangalore, India. The detailed description of how the tattoo was made follows: first the arm was wetted, then the image was transferred with a copying pencil and then, using three needles tied together and India ink, the friend began to tap on the skin. The entire transfer of the image of San Gabriele lasted a couple of hours, and then after an approximate disinfection, he had to wait a couple of days before seeing it clearly appear on his arm. Then Don Nicola asks him about his friend. He was from Ortona, Pierino says, and this was his job before the imprisonment. A job he had learned from his parents. He ends the interview by underlining the value of memory and the religious devotion of this practice. Don Nicola asks at the end of the interview, as a post scriptum, a precise description

and the measurements of the tattoo, which are about twenty centimetres by fifteen and bears the writing - India 1941 - and two lilies on the sides of Saint Gabriel.

"Verba manent", one might say at the end of this tape, if there were not a fourth audio document, an articulated reflection on the tattoo by Don Nicola Jobbi himself.

Don Nicola's personal reflection begins by evaluating "the moral aspect of tattooing", from the observation that, since this operation does not involve any impairment to the physical and psychological integrity of the individual who undergoes it, the tattoo done with the necessary medical precautions, that is, to prevent harmful consequences is in no way condemned by Christian morality. And Don Nicola Jobbi's consideration extends to the absolute legality for populations that traditionally use tattoos for decorative, symbolic, or religious purposes. He even arrived at maintaining that, even in cases of tattoos linked to "criminal organisations" used to indicate hierarchical ranks, these are not condemnable as such, but rather the acts committed, or the legality subverted in participating in such organisations. The most conventional moral assumptions, however, fall within the condemnation of tattooing by our parish priest who considers them a characteristic element of simple classes, "of farmers, workers, shepherds, fishermen, and sailors, merchants... and criminals". On the other hand, erotic tattoos or tattoos that could "offend public decency" are firmly disapproved, even if they are done in non-visible places on the body.

In religious tattoos, which he addresses meticulously, he is rooted in the general principles of religious morality with attempts to reorganize doctrinal principles and customs, trying to distinguish between official rite, fanaticism, and superstition or what he defines as "strange and capricious devotions". Therefore, he is forced to recognise the condemnation for the interpretation of these tattoos as religious but, at the same time, he absolves them from being considered true sins, evaluating in any case their good and bad faith. While strongly advising against them, but without severity, he seems to definitively reconcile them as acts that are not sinful in themselves. He fully absolves only tattoos that manifest the faith or reasons of other religions.

Finally, the principles of religious moral evaluation are predictable. Yet, paradoxically, they shatter and disperse due to a technical problem that interrupts the recording in the middle of reasoning, among the rustling and noises of cables and household appliances, among the Mameli anthem that sneaks in from the radio broadcast that accidentally falls onto the magnetic strip. The recorder, being left inadvertently (perhaps) in recording mode, thus also capturing the traffic and syncopated shreds of recordings between those devices and mechanisms with which our Don Nicola Jobbi has captured for us, 'verba manent', an ancient, precious and incomparable memory, a sign of our history and tradition and of the identity of entire communities. A journey through time on the edge of a magnetic strip that has allowed us to know a fragment of the deep anatomy of our civilisation.

References.

"L'ascolto e la visione. Don Nicola Jobbi e l'Appennino centrale del XX secolo", exhibition catalog dedicated to Don Nicola Jobbi, created by the ICCD-Central Institute for Cataloging and Documentation, edited by Spitilli, C., 3 May - 31 August 2022 ICCD - ex Chiesa delle Zitelle Edizioni. Nicola Jobbi Study Center, Bambun Publisher, Anthropology and Ethnomusicology Studies and Documents Series, Teramo, 2020.

- "Tatuaggio – Storie dal Mediterraneo", MUDEC exhibition catalog Milan, 28 March 2024-28 July 2024, 24 ORE Cultura srl catalogue, Milan, 2024.

- Pigorini Beri, C. "Costumi e superstizioni dell'Appennino marchigiano/i (S. Lapi, 1889). Citta di Castello, 1889
spanid=selectionBoundary_1763366215048_8003206369982426 class=rangySelectionBoundary style=line-
height: 0; display: none;/span",

Supplementary Information_2

Scientific Analysis and Preservation Protocols for Tattooed Skin Specimens from "Luigi Cattaneo" Anatomical Wax Collection by Vadrucchi et al.

Chiaramaria Stani, Luis Guillermo Garcia Ordonez

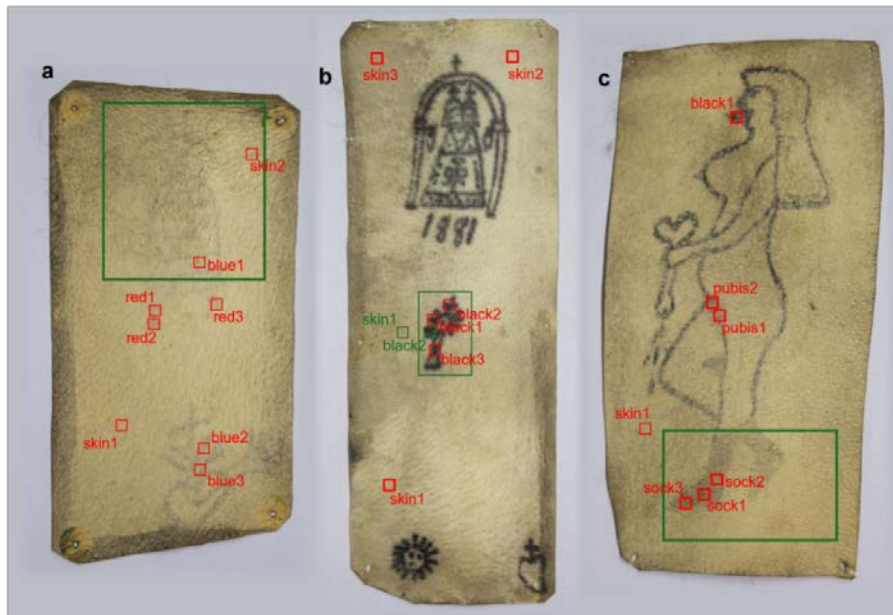


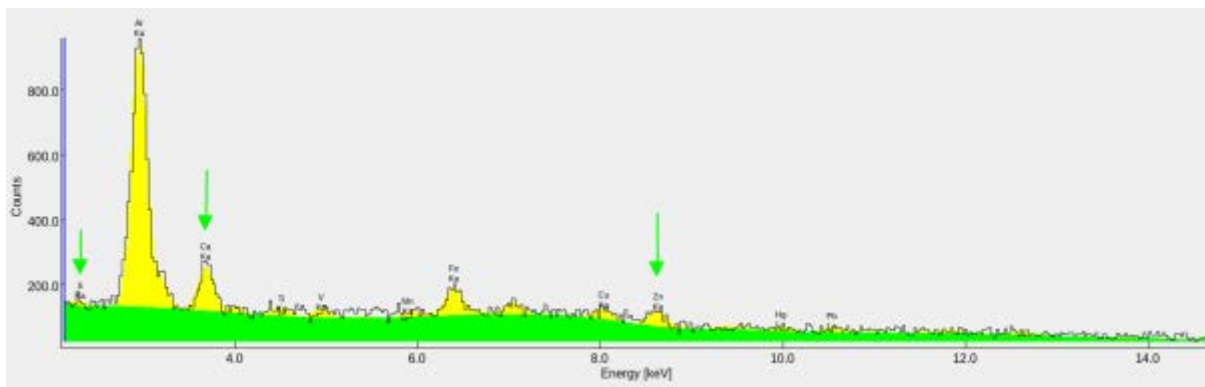
Fig. S2_1: a-c) Comprehensive visualisation of all areas and spots measured using both IR (red frames) and XRF (green frames) spectroscopy on specimens 1A, 6A, and 5B, respectively.



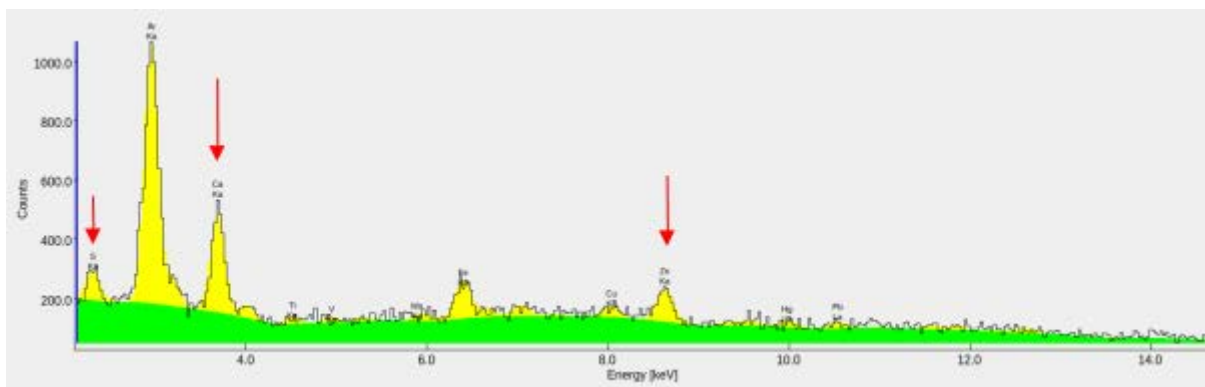
Fig. S2_2: Verso of the three specimens. a, c) Specimens 1A and 5B show rounded hollows and greyish fibres, possibly representing dermal ridges and collagen residues; b) specimen 6A shows pronounced penetration of black ink through the skin layer.

Table S2_1: Elemental energy distribution between bare skin and tattooed skin of object 6A. Elements that showed a significant increase in counts are highlighted in red.

Element	Line	Energy (KeV)	Bare Skin			Tattoo		
			Peak Area	Continuum Background	Chi-square	Peak Area	Continuum Background	Chi-square
S	Ka	2.307	91 ± 51	1599	0.56	625 ± 63	2114	0.84
Ca	Ka	3.69	978 ± 58	1397	0.73	2203 ± 73	1824	1.9
Ti	Ka	4.509	175 ± 48	1252	0.84	153 ± 49	1348	0.33
V	Ka	4.95	172 ± 47	1247	1.13	108 ± 49	1408	1.35
Mn	Ka -	5.895	140 ± 47	1281	1.24	103 ± 77	1618	1.3
Fe	Ka	6.399	658 ± 55	1326	0.48	950 ± 62	1603	0.96
Cu	Ka	8.041	250 ± 48	1263	0.7	289 ± 57	1771	0.59
Zn	Ka	8.631	388 ± 45	960	0.7	853 ± 60	1562	0.55
Hg	La	9.98	79 ± 29	806	0.23	132 ± 40	1432	0.93
Pb	La	10.541	115 ± 28	755	0.54	169 ± 38	1372	0.52



Bare skin scan (1)



Tattooed skin scan (2)

Fig. S2_3: Comparison of spectra between bare skin and tattooed skin areas in object 6A.

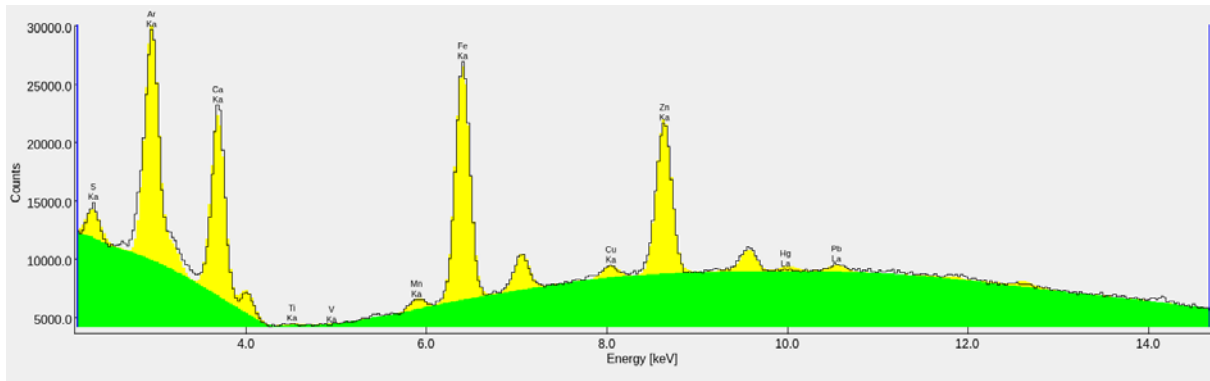


Fig. S2_4: XRF spectrum of the scanned rectangular area containing the socks in object 5B.

Table S2_2: Elemental energy distribution in the scanned rectangular area of object 5B

Element	Line	Area Std	Energy	Continuum	Chi-square
S	Ka	15525 ± 473	2.307	138233	4.96
Ca	Ka	101873 ± 497	3.69	83045	21.6
Ti	Ka	770 ± 287	4.509	51760	0.51
V	Ka	291 ± 290	4.95	50350	0.43
Mn	Ka	5680 ± 363	5.895	68047	0.35
Fe	Ka	137005 ± 552	6.399	77626	4.96
Cu	Ka	7422 ± 416	8.041	100756	1.03
Zn	Ka	94117 ± 559	8.631	110392	2.5
Hg	La	2088 ± 356	9.98	116581	1.81
Pb	Ka	0 ± 1	74.143	0	0
Pb	La	4276 ± 344	10.541	107981	0.57