



A sophisticated man, indeed.

Ignazio E.P. Porceddu¹

Istituto Nazionale di Astrofisica – Osservatorio Astronomico di Cagliari, Via della Scienza
5, I-09047 Selargius, Italy e-mail: ignazio.porceddu@inaf.it

Abstract. When we talk about friends, the bond that binds us, or that bound us, this must be told with sincerity, if friendship is sincere, or, sadly in this case, it was sincere. And so I hope to do in this note, not telling about an ideal and punctual "Nichi", but the man I have seen in the twenty years of working with him: I hope without hypocrisy, as it was our relationship. This contribution has been translated by Andrea Possenti from the originally provided Italian version.

Key words. Telescopes: radiotelescopes – Sardinia Radio Telescope: construction phase

1. Introduction

Nichi was a valuable scientist, but it would be an understatement and downright demeaning to see only his passion for astrophysical research in *white gloves*. Sometimes, indeed often, you have to *get your hands dirty*, confront the reality of a daily life that asks you to wear work gloves to create the objects, the technological infrastructures, which this science makes it possible to develop. Instrumentation, technological systems and laboratories, and the buildings that must house all of this. And so my most recent work experience, my activity, is closely linked to the "Operations" of the Sardinia Radio Telescope (I will refer to it later as SRT), and it is precisely the side of "Nichi as a construction site person", that I hope to be able to tell with this brief memory.

The root mean square researcher - I do not deviate from this *cliché* - reads head and tail of a paper, then decides whether it is worth going into the details. Here, I would go to the conclusions: what for me was Nichi D'Amico as Director of the Astronomical Observatory of

Cagliari and as Director of the Sardinia Radio Telescope, what were the moments that made him special, for for good and for less good. Others will speak of his Presidency of our Institute, where his propulsive spirit has certainly not stopped, but has had to come to terms and compete with the centrifugal forces and the many souls that populate our Entity.

2. The Sardinia Radio Telescope

Nichi was, at the same time, a very concrete person and a visionary, starting from the construction phase of the SRT, with all the positive meaning that the term visionary has.

Nichi arrives in Cagliari in 2001 as the newly appointed Director of the Astronomical Observatory of Cagliari. At that time, ten years have already passed since the start of the first operational phases necessary for the selection of the site to host the SRT. In 2000, under the coordination of the Institute of Radioastronomy of Bologna (in those years still part of the National Research Council) and with the support of the Astronomical



Fig. 1. This is how the Pranusanguni plateau appeared from the start of the construction activities of the base of the Sardinia Radio Telescope. An arid land, intended for sheep grazing, which will become the site of one of the main international radio telescopes.

Observatory of Cagliari, it had already been partially assigned the funding for the construction of the executive design of the radio telescope as well as for the construction of the building and technological infrastructures that will have to support it. Just as the design of the antenna base was already underway, an essential element to guarantee the pointing performance and stability that the SRT had to guarantee.

A not easy choice of the site, the result of the combination of the existent traffic circulation, the connected logistics, the absence of substantial electromagnetic interference, and the *geometeolocation*. The synthesis, the compromise, is the "Pranusanguni" plateau, inserted in an area with a low level of anthropisation and with a strong need to find opportunities for growth in the territory. Nichi ar-

rives when the design activities of the large SRT basement are completed, and the excavation has been started, supported by his predecessors, Angelo Poma and Flavio Fusi Pecci.

Nichi immediately demonstrates that he has concrete, very specific objectives. In this phase there are moments of initial harshness due to his grim character and not very used to consulting his collaborators. Certainly it looks like a war machine, dropped into a reality that perhaps was not yet clear how challenging it would be to make the SRT. Instead, Nichi was very clear: he had to build a state-of-the-art radio telescope in a country where administrative and bureaucratic times are the best to make anyone lose passion and desire.

There are many episodes that I lived with him where the meetings with his interlocutors ended abruptly, even with deliberate theatrical-



Fig. 2. Open Day 2007, the public event wanted by Nichi to inform citizens about the progress of the construction of the radio telescope. Many hundreds of citizens visited the site, a great media success and a strong signal of transparency in the realization of a public work.

ity, aimed at directing the participants towards his goal. He traveled by geodesics, he rectified angles rather than smoothing them, in the sense that he found an agreement with those in front of him only if the compromise solution ... was what he had in mind.

In this sense, he has sometimes been very ungenerous with other *visionaries*, equally important for the growth of the scientific and technological culture of our organization. But not aggressive and motivated enough, at least not as much as Nichi was in those moments and in those situations. Many friends and colleagues, female and male, whose names it makes no sense to mention, but who have been generous, who have lived their relationship with Nichi in an intense way.

The choices were born from this strong and decisive character; others would have called

them as *unacceptable risks* made by Nichi during the construction phase of the radio telescope. Actions that have made it possible to drastically reduce construction times: consider the lifting, *one-shot*, of the entire *basket* of the primary mirror, an operation never attempted before for a radio telescope of such size and complexity. An operation media-inclusive, an aspect to which Nichi was always attentive to increase the visibility and the positive attention on the radio telescope by stakeholders.

Attention to the media, but also great attention to the repercussions that this visibility could give to the territory hosting the radio telescope. So many initiatives he has promoted, allow me to add with the phenomenal contribution of all the staff of the Astronomical Observatory of Cagliari and a lot of care, also operational, put over the years by many friends



Fig. 3. It is 22nd May 2010, it is the day of the "big lift": one of the largest European cranes is used to bring the rib structure that will support the primary mirror of the radio telescope to the top and place it on the alidade. Another public event, great technological success resulting from courageous choices: this is Nichi.

and colleagues, female and male, of the INAF Research Structures more directly engaged in the technological development phase of the SRT.

Among the many, the opening of the construction site to the public at the end of the construction phase of the basement, when the first beams of the radio telescope had already crossed the streets of the Gerrei, with no little effort and with a lot of patience and understanding on the part of the inhabitants of the municipalities, that of Sant' Andrea Frius in particular. But also the initiative to create, still in the assembly phase of the metal structure of the alidade, an Info Point in the space that was previously occupied by the mountain colony of Pranusanguni.

An initiative where the Cagliari Astronomical Observatory invested significant human resources, and which did not see the start for reasons whose analysis is beyond this context. Great opportunity lost,

certainly, with a lot of regret and a lot of bitterness in the mouth.

3. Cagliari and the headquarters of the Astronomical Observatory

Nichi was also a visionary for the growth of the Cagliari Observatory. When he started his challenge as Director, the physical spaces available for the laboratories and for the staff were those of the old Capoterra headquarters, perched on a rocky hill, where it was impossible to create the spaces for the laboratories and for the staff that SRT would have requested. And that location was also too far from where the radio telescope was being born.

For a series of events, actions and operations, on which it is not useful to go into details, he identified the abandoned area of the ammunition depot of the Ministry of Defense, in the locality of *Cuccuru Angius*,



Fig. 4. The new headquarters of the Astronomical Observatory of Cagliari

along the state road 387, in the Municipality of Selargius.

Unofficial investigations and informal inspections have been the basis for creating over time what is now the seat of the Astronomical Observatory of Cagliari. A choice that has dissatisfied, let me put it mildly, the local administrations of the municipalities of Gerrei who were expecting a more significant presence, a fallout, in terms of image and economy, that the new headquarters of the Cagliari Astronomical Observatory could have guaranteed.

Years of collaborative work with the Sardinia Region and the Municipality of Selargius led in September 2013 to move the headquarters of the Astronomical Observatory of Cagliari from Poggio dei Pini, in the Municipality of Capoterra, to the current site of via della Scienza, in the Municipality of Selargius, but strongly inserted in the urban fabric of the Metropolitan City of Cagliari. A choice that has brought several and not insignificant problems and inconveniences, it must be said, but crucial to allow the Astronomical Observatory to grow.

4. Day by day

Nichi was generous, too, with his work, and with the time he devoted to it. And he often asked for pieces of life even from many collaborators, motivating and encouraging them. However, what he asked of many of us was less than he asked of himself: I have no memory of his refusal of an invitation to participate in a public conference or a meeting with local administrations. This being *embedded* in his work has marked him physically, has materially changed his appearance even in everyday life, and is complicit in his untimely death, little to say.

When I met him on his first visit to Cagliari, the image he gave me was that of a wild boar: wild, the term empathy out of his vocabulary. But I have the presumption to think that the interaction of a genuine Sicilian like him, as hospitable and generous outside of work (I had the honor of enjoying the friendship of his family on several occasions) as rigid inside the walls of the office, with the equally tough inhabitants of Sardinia, has improved both.

Nichi was not ecumenical, it was not part of his DNA. It wasn't divisive either, but cer-

tainly if you didn't fit into its geodesics you were overlooked.

Little to say, this side of his character has never softened. However, no one with a intellectual honesty can deny the profound transformation, in an empathic sense, that his approach, his own character, had during the years of his life in Sardinia. Human skin has become softer, but *grit and geodesic* have never been lacking.

5. Conclusions

Nichi was not, and could not be, simple. He was a very complex person. We miss many things about him, and many others, frankly, we do not. But this is friendship: seeing him show up at the office for a chat, often long, where he told me about the problems that were around.

Some of which were sometimes, kindly, passed on to me for the solution during the chat, but no longer as a boar. That was always there, but in depth. While the smile, sincere, of the offer of coffee, that was never lacking. Ciao Nichi.

Acknowledgements. I used the photos from the archive of the Astronomical Observatory of Cagliari, all taken by our colleague Gianni Alvito, who followed the entire construction phase of the radio telescope and of the Selargius headquarters, with increasingly sophisticated technologies and tools for photographic and video shooting, from the 90s to today.

I believe that thanks also go to all the colleagues who in these years of Nichi's presence have been encouraged (I understand this is a funny euphemism) to give 200% of their time and their availability. For many, though not all, this was a time of personal growth.