

TORRES TRANSFORMADORAS DE ELECTRICIDAD EN LA PROVINCIA DE VALENCIA. UN PATRIMONIO EN EL OLVIDO

ELECTRICITY TRANSFORMER TOWERS IN THE PROVINCE OF VALENCIA. AN HERITAGE IN THE OBLIVION

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INTRODUCCIÓN / INTRODUCTION

A finales del siglo XIX se inicia el desarrollo de la producción de energía eléctrica a pequeña escala en los núcleos urbanos españoles. La red consistía en un generador de corriente continua de baja tensión que alimentaba el alumbrado público próximo al punto de generación. Sin embargo, había un problema en el transporte de la electricidad debido a las pérdidas por calor en los tendidos eléctricos [1]. Entre 1884 y 1885 Ganz & Cia [2] construye el primer transformador de corriente alterna que elevaba la tensión en la red minimizando las pérdidas en el transporte, de modo que, a finales del XIX y principios del XX, las torres transformadoras pasan a formar parte del paisaje urbano.

La primera compañía eléctrica valenciana fue la Sociedad Española de Electricidad, constituida en 1883. En mayo de 1907 se funda la sociedad Hidroeléctrica Española, (Hidrola o HE), con objeto de construir una presa en el río Júcar para abastecer Madrid y Valencia [3]. En 1908, HE consigue el contrato para el alumbrado público eléctrico del ayuntamiento de Valencia y crea, en 1910, la distribuidora ELECTRA VALENCIANA [4]. En el mercado valenciano, HE tenía una posición dominante en cuanto a producción, pero no en distribución, por lo que a partir de 1927 adquiere un tercio de las acciones de VOLTA, empresa fundada en 1913 y que distribuía a la mayor parte de la provincia de Valencia. En vísperas de la guerra civil, HE había logrado producir el 70% de la electricidad de la Comunidad Valenciana, y distribuir al 50% de los abonados. [4]. Finalmente, en 1957, ELECTRA VALENCIANA es incorporada a VOLTA y en 1960, se lleva a cabo la fusión de VOLTA y HE.

At the end of the 19th century, the development of small-scale electrical energy production began in Spanish urban centers. The network consisted of a low-voltage direct current generator that fed the public lighting close to the point of generation. However, there was a problem in the transport of electricity, due to heat losses in power lines [1]. Between 1884 and 1885 Ganz & Cia [2] built the first alternating current transformer that raised the tension minimizing transmission losses. By the end of the 19th century and the beginning of the 20th, transformer Towers were part of the urban landscape.

The first Valencian electricity company was the Sociedad Española de Electricidad, established in 1883. In May 1907, the company Hidroeléctrica Española (Hidrola or HE) was founded with the aim of building a dam on the Júcar river to produce electrical energy to supply Madrid and Valencia [3]. In 1908, HE obtained the contract for the electric public lighting of the Valencia City Council and, created, in 1910, the ELECTRA VALENCIANA distributor [4]. In the Valencian market, HE had a dominant position in terms of production, but not in distribution, so from 1927 it acquired a third of the shares of VOLTA, a company founded in 1913 that distributed to most of the province of Valencia. On the eve of the civil war, HE had managed to produce 70% of the electricity in the Valencian Community and served the needs of 50% of the subscribers [4]. Finally, in 1957, ELECTRA VALENCIANA was incorporated into VOLTA and, in 1960, VOLTA and HE were merged.

OBJETIVOS Y METODOLOGÍA

El objetivo de este trabajo es analizar una pequeña muestra de estas torres de transformación de la provincia de Valencia, con el fin de ponerlas en valor y promover su preservación y su catalogación como patrimonio industrial. Una vez identificadas y georreferenciadas, se han consultado varias fuentes, constatando que la información existente es bastante escasa. Posteriormente, se ha realizado una visita in situ, para la toma de datos y el análisis de las características arquitectónicas. Finalmente, se propone una ficha tipo para promover la creación de una base de datos.

OBJECTIVES AND METHODOLOGY

The objective of this study is to analyze a small sample of these transformer towers in the province of Valencia, to enhance their heritage value and to promote their preservation and cataloging as industrial heritage. Once identified and georeferenced, several sources have been consulted, noting that the existing documentation is quite scarce. Then, an on-site visit was made to collect data and analyze the architectural characteristics. Finally, a data form is proposed, with the aim of promoting the creation of a database.



Imagen 1. Torre Volta 17



Imagen 2. Torre Volta 75



Imagen 3. Torre Volta



Imagen 4. Torre HE



Imagen 5. Torre Volta



Imagen 6. Remates de azulejos



Imagen 7. Detalle de los diferentes rótulos

LAS TORRES TRANSFORMADORAS DE ELECTRICIDAD

En este epígrafe se analiza una pequeña muestra de diferentes torres transformadoras, señalando, por su interés arquitectónico, dos, propiedad de las compañías VOLTA y ELECTRA VALENCIANA .

THE ELECTRICITY TRANSFORMER TOWERS

In this section, a small sample of different transformer towers is analysed, highlighting, due to their architectural interest, two of them, owned by the companies VOLTA and ELECTRA VALENCIANA .

a) Torres de VOLTA e Hidrola (HE) en el término municipal de Alzira

La imagen 1 muestra la torre ubicada junto a la CV 50 en el acceso desde Tavernes. Se trata de una torre de planta rectangular y dos alturas. Destaca, desde el punto de vista arquitectónico, la composición de las fachadas delantera y trasera, formadas por un cuerpo principal central, flanqueado por otros dos cuerpos laterales. Es de señalar, el zócalo, las impostas horizontales y el remate superior de azulejos azules y blancos, siguiendo un patrón en damero. Hay que destacar el rótulo VOLTA S.A. 17 de tipografía moderna, tipo palo, sin remates, a excepción del brazo de la letra L y el asta horizontal de la letra T, ambas rematadas con serifas. La torre de la imagen 2 (Volta 75) es similar, aunque los azulejos del remate son de menor tamaño. Ambas tienen pintadas.

Image 1 shows the tower located next to CV 50 in the access to the city from Tavernes. It is a rectangular tower with two levels. From an architectural point of view, the composition of the front and rear facades stands out. They are formed by a central main body, flanked by two other side bodies. The basement on the ground floor, the horizontal imposts and the upper finish, covered by a strip of tiles in white and blue following a checkerboard pattern, are pointed out. The sign VOLTA S.A. 17 has to be highlighted. The typography is modern, stick type, without serifs, except for the arm of the letter L and the horizontal flagpole of the letter T, both finished with serifs. The tower in image 2 (Volta 75) is similar, although the tiles at the top are smaller. Both towers have graffiti.

En esta ciudad se han identificado otras dos torres de VOLTA construidas en 1960, así como una torre de Hidrola (HE) de 1965. Las tres siguen la misma estructura y composición, totalmente diferente a las anteriores y su estado de conservación parece mejor. Son más pequeñas, sin impostas remarcando los niveles y con cubierta a cuatro aguas en vez de plana (imágenes 3, 4 y 5). En las imágenes 6 y 7 se pueden ver detalles de los remates y rótulos.

In this city, two other VOLTA towers, built in 1960, have been identified, as well as a Hidrola (HE) tower built in 1965. The three follow the same structure and composition, totally different from the previous ones and their state of maintenance seems better. They are smaller, without imposts highlighting the levels and with a pitched roof instead of flat (images 3, 4 and 5). Details of the upper finishes and the signs can be seen in images 6 and 7.

b) Subestación ELECTRA VALENCIANA / ELECTRA VALENCIANA substation (Ruafra, Valencia)

Esta torre de transformación (Imagen 8a 8b) fue construida en 1930. El valor a destacar de esta torre es el rótulo ubicado en el remate (Imagen 8c) formado por un mosaico de azulejos en el que se indica el nombre de la empresa suministradora SOCIEDAD ANONIMA ELECTRA VALENCIANA y el número de la subestación nº 802. Este rótulo forma parte de los archivos de la plataforma "tipos que importan" [5], cuyo objetivo es contribuir a la conservación y difusión de la cultura local a través de la recuperación del Rótulo Comercial Valenciano.

Image 8a shows the substation located in Ruafra, Valencia. It is a small rectangular tower with a tiled roof. The image 8b shows the same tower with some graffiti. The image 8c shows a close-up of the top of the tower, which features a mosaic of tiles with the name 'SOCIEDAD ANONIMA ELECTRA VALENCIANA' and the number 'SUB-ESTACION N° 802'. This sign is part of the archives of the platform "types that matter" [5], whose objective is to contribute to the conservation and dissemination of local culture through the recovery of the Valencian Commercial Sign.

Its state of maintenance is not optimal, showing dampness and graffiti.

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Los resultados de esta investigación muestran la escasez de información sobre las torres de transformación de electricidad, justificando la necesidad de desarrollar una base de datos de las mismas, con el fin de protegerlas, dado que forman parte de una red de elementos industriales de valor histórico y patrimonial. Esa base de datos incluiría, además de la localización, los elementos singulares, arquitectónicos o no, que les proporcionan un valor añadido (tipo de cubierta, composición de las fachadas, revestimientos, azulejos, rótulos y tipografía). La imagen 9 muestra la ficha tipo propuesta. La creación de este tipo de inventario debería llevarse a cabo por comarcas y extenderse al resto de provincias de la Comunidad Valenciana.

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The results of this research show the scarcity of information on the electricity transformer towers, justifying the need to develop a database, in order to protect them, since they are part of a network of industrial elements of historical and heritage value. This database would include, in addition to the location, the unique elements, architectural or not, that provide added value to them (type of roof, composition of the facades, coatings, tiles, signs and typography). Image 9 shows the data form proposed. The creation of this type of inventory should be carried out by regions and extended to the rest of the provinces of the Valencian Community.

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RESULTADOS Y CONCLUSIONES / RESULTS AND CONCLUSIONS

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