

'Free Play' between Science, Art and Conjuring: Advertising and the Knowing Prosumer

Martha Blassnigg

The HERA project, *Technology, Exchange and Flow: Artistic Practices and Commercial Application* (TEF), investigated the active engagement of the viewers in relation to the creative affinity and exchanges between advertising and experimental film at times of technological innovation. Drawing on previous research in the development of this project, the Plymouth University team focused on issues of cognition in the proactive processes of perception of audiovisual media as they are inherently inscribed in the technology, and which, in this way, entails its own history. What follows is a brief essay drawn from an assemblage of images around an early example of advertising that is symptomatic of the close dialogue between the sciences and the public. It reveals practices that were applied to many of the experimental apparatuses that the HERA project, *Technology, Exchange and Flow: Artistic Practices and Commercial Application* (TEF), investigated the active engagement of the viewers in relation to the creative affinity and exchanges between advertising and experimental film at times of technological innovation. Drawing on previous research in the development of this project, the Plymouth University team focused on issues of cognition in the proactive processes of perception of audiovisual media as they are inherently inscribed in the technology, and which, in this way, entails its own history. What follows is a brief essay drawn from an assemblage of images around an early example of advertising that is symptomatic of the close dialogue between the sciences and the public. It reveals practices that were applied to many of the experimental apparatuses that

captured and projected moving images (through technological manipulation and emotively during perception), providing their audiences with 'opportunity' and 'room for action' through proactive cognitive engagement.

Advertising relies on a precarious balance when presenting their targeted audience with something classified as 'novel', and frequently pushes the envelope beyond the familiar through aesthetic, perceptual and rhetorical experiments. There is a fine line between conjuring and science, make-believe and presented fact, that lures the consumer into an active participation in the reception, recollection and, potentially, enactment of the prospect suggested by the advertised service, product or lifestyle. Just how this balance works, the complex processes involved in the

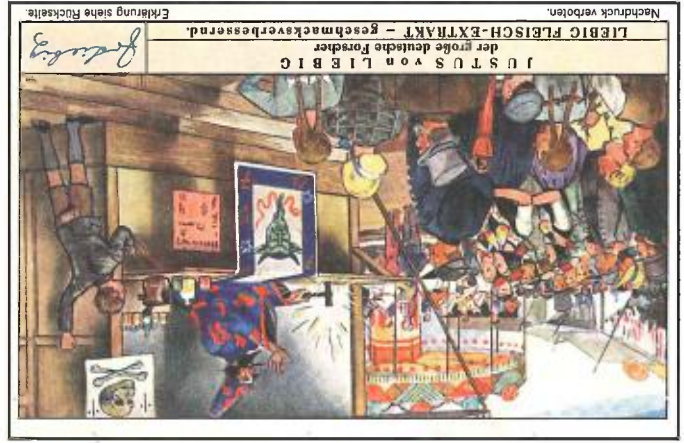


Fig. 01: Series *Justus von Liebig, der große deutsche Forscher* (Justus von Liebig, the great German scientist), 1939



Fig. 03: Liebig in his lab in Glessen



Fig. 06: The Liebig Meat Extract as sold today

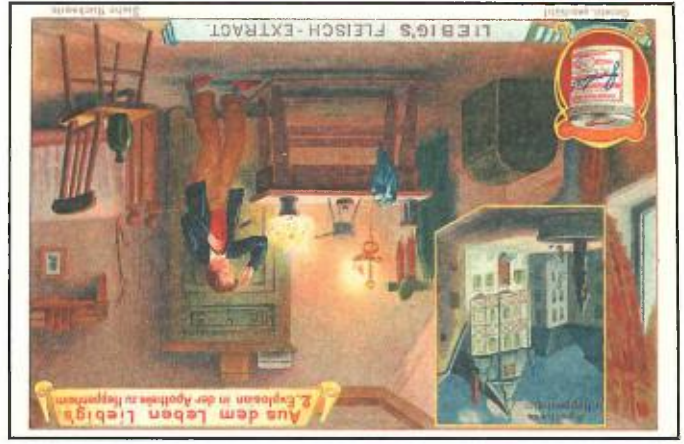


Fig. 02: Series *Aus dem Leben Liebig's* (From Liebig's Life), 1903, card: Explosion in the Heppenheim pharmacy



Fig. 04: Series *Aus dem Leben Liebig's* (From Liebig's Life), 1903, card: Liebig in the lecture theatre in Munich

convergence of science, technology and the arts, is transparently observable in some outstanding 19th century experimental advertising practices, especially in relation to the commercialisation of audiovisual media technologies.

Conjurers in the 19th century associated themselves with the sciences, at a time when science itself still entertained close contact with the public, and they displayed the latest experiments in their stageshows, alongside other sophisticated trickery and artistry, on open public platforms. The implicit contract between conjurer and audience was built on the fact that the conjurer's scientific knowledge was ahead of that of their audience, but not too much ahead, allowing for 'play' (in the sense of 'free action', 'room for action' or 'scope for activity') in the fine balance, thus encouraging participation. The audience was both complicit in the performance and, at the same time, the conjurer's greatest competitor, since the appeal lay in unravelling the trick. The wondrous aspects of the performance lay in those domains where belief was constantly challenged, expanded and reconfirmed through the sophisticated craftsmanship of novel scientific innovation and technological enchantment. The negotiated tolerance of 'room for action' lay in the interplay of curiosity, doubt and the desire to know and experience novelty and the unfamiliar that embraced manifold cultural practices built on user-participation.

As figure 1 illustrates, the famous pioneer of organic chemistry, Justus Liebig (1803-1873), was reportedly fascinated in his youth by fairground conjuring shows that exhibited the latest scientific experiments (on the right of the image, Liebig is depicted as a young boy, watching a demonstration of firecrackers). As the son of a druggist and dealer in painters' supplies and common chemicals in Darmstadt, Liebig first made contact with experimental chemistry before he was apprenticed to the apothecary Gottfried Pirsch in Heppenheim at the age of 15. In figure 2, the image (and its reverse side) describe Liebig's fascination and first experiments with firecrackers, which he is said to have watched at the fairground in Darmstadt; his apprenticeship reportedly came to an end when one of his secret experiments with fireworks in his attic room resulted in an explosion (as depicted in this 1903 Liebig trade card).

The intrinsic alliance with science provided conjurers with an authorisation of their 'truth' and credibility, whilst the most successful scientists at the time – such as Liebig himself, as well as Michael Faraday and Humphrey Davy in England – similarly understood that good science knew how to engage its public as co-creators and conspirators in the event as it happened. Liebig, for example, was hailed by his students for his unique ability to conduct each experiment as if it was his first, allowing for the

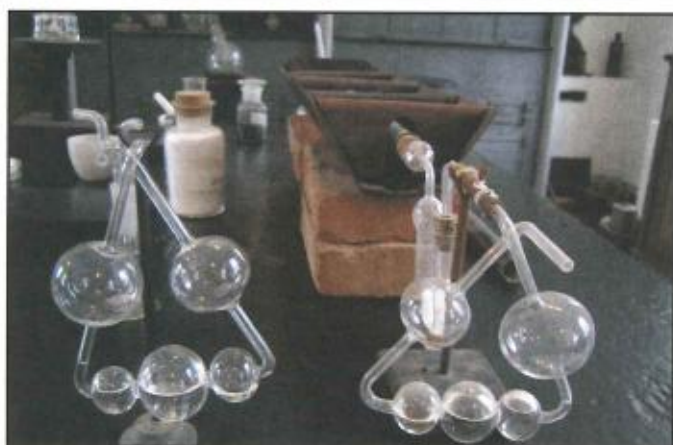


Fig. 05: Liebig Museum today, Giessen (Photographs taken in 2009)

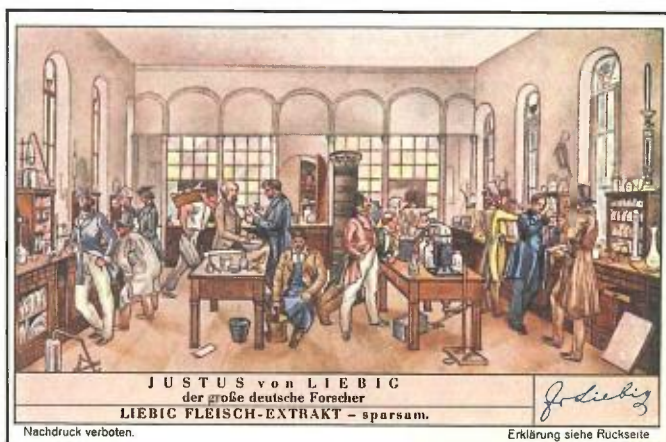
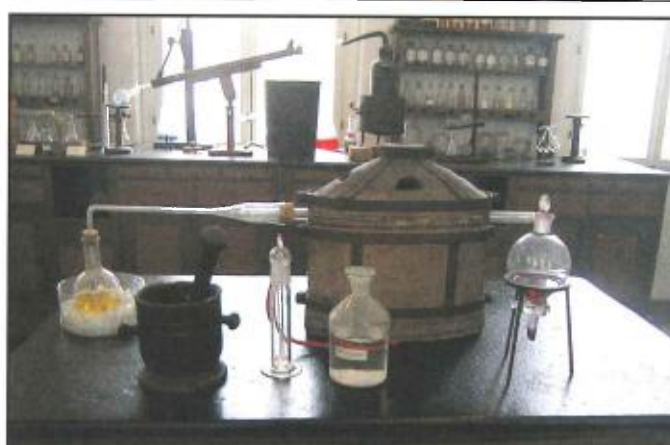


Fig. 07: *Justus von Liebig, der große deutsche Forscher* (Justus von Liebig, the great German scientist), 1939



Fig. 08: Series *Aus dem Leben Liebig's* (From Liebig's Life), 1903, card: View on Fray-Bentos, location in Uruguay of the Liebig Extract of Meat Company

Fig. 12: Backside of Liebig trade card with the solution to a riddle (published in London It indicates the Pound 5tg. price for the extract pot)

LIEBIG COMPANY'S FLEISCH-EXTRACT
aus F.R.V.-BENTOS.
Höchste Auszeichnungen auf ersten Wettbewerblungen seit 1867.
1892 222 B

Nur echt wenn jeder Topf den Namenszug „J. V. LIEBIG“ in blauer Schrift quer durch die Etikette trägt.

Der Lehrer der Kochkunst, L. Kurth in Berlin, äussert sich in dem von ihm verfassten Illustrirten Kochbuch wie folgt: „Liebig's Fleisch-Extract ist das geeignetste Mittel zur Verstärkung von Brühen und Schüsseln und bisher unübertroffen.“ Derselbe Autorität ertheilt auch, zum Schutze einer Anweisung zur Bereitung von Tafelbouillon, Seite 57: „An Stelle der Tafelbouillon kann man Liebig's Fleisch-Extract verwenden, da die Bereitung der ersteren sehr leicht ist, sich nur lohnt, wenn man viel Fleischhänge zur Verfügung hat.“

Liebig Company's Fleisch-Extract ist überall erhältlich, ausser in den bekanntesten Theilen auch in München.
2 2 und 5 Pfd. möglich.
Publishers: Liebig's Company, London.

6	3	6	7	1	7
3	3	1	1		
6	3	6	7	1	7

Fig. 10: Album



Fig. 11: Liebig Museum, Giessen (Photographs taken in 2009) (Label "Marmite": Brewer's Yeast according to Liebig)



Fig. 09: Album



background of his investment in the popularisation of chemistry. Liebig not only retained control during his lifetime over the quality of the by Giebert in Uruguay from 1862 produced meat-extract (today known as soup stock OXO, or competing products Maggi, Knorr, etc.), but the product can be seen as part of the larger campaigns to promote the scientific findings of organic chemistry in applied areas such as agriculture and cooking practices. It also promoted Liebig's original vision of a cheap meat supplement for the poorer population in Europe whose staple diet consisted largely of potato. Although the pharmaceutical classification was soon downgraded from medicinal concentrate to food-supplement and cooking ingredient, its legacy was still traceable in the marketing of the product, especially in the original Latin name of the product, Extractum Carnis Liebig, and Liebig's authorised signature in blue ink (see figures 6 and 11). Frequently the product's special quality was still indicated as "verdauungsfördernd" (trans. "stimulates digestion") on the trade cards.

The high-quality chromo-lithographic advertising trade cards, so-called Liebig cards (*Liebigbilder*), were introduced in 1872, when the extract's mass production encountered severe competition with the introduction of refrigeration on ships, which enabled the export of fresh meat from the Americas to Europe.

greatest participation in, and co-creation of, its outcomes (see, for example, the depictions of Liebig in his work as a chemist in figures 3, 4, 5, 6 and 7). The Royal Institution in London, which was founded as an independent institute for public outreach, still describes its key aim – "connecting people with the world of science" – with the slogan: "We're about discovery, innovation, inspiration and imagination." Behind such outreach promotion there has always been the continuous struggle to fund research, the commercial application of science, and the ambition to apply and publicise knowledge through user-participation. In the course of Liebig's (at times) fierce campaign to promote chemistry internationally as the 'mother of all sciences', he made use of a great range of available connections and media to engage the various stakeholders – from science, government, industry and the arts to the public – in a new understanding of organic chemistry as instrumental to the foundation of a scientific knowledge connected to the crucial phenomena and processes of everyday life. This campaign was geared to the liberation of chemistry from the constraints of the subservient position it occupied in relation to pharmacy and physics.

The fact that Justus Liebig lent his name to a product called "Liebig Meat Extract", which today might seem too ordinary and commonplace to deserve much attention, has to be understood from this

Series *Das Rind im Liebigtopf* (Cattle in the Liebig Pot), 1878–1883



Fig. 13a: *Das Rind im Schlachthaus*



Fig. 13b: *Liebig vor dem Rind als Richter*



Fig. 13c: *Rind zieht Wagen mit Liebigtopf*



Fig. 13d: *Tauernde Kuh und Kalb am Grabe*



Fig. 13e: *Nachkommen am Grab*



Fig. 13f: *Urteil der Preisrichter*



Fig. 14: *Liebig Album c. 1900 (Fam. Hörtnagl/Schiestl, Kufstein)*



Fig. 15: *Photograph taken in the Liebig Museum, Giessen, 2009*

Series Enthüllte Zauberkünste (Revealed Magic Tricks), 1894



Fig. 16a: Die Geister



Fig. 16c: Olympia



Fig. 16e: Der redende Kopf



Fig. 16b: Der Magnetismus



Fig. 16d: Flora



Fig. 16f: Die Najade

VERITABLE EXTRACT DE VIANDE LIEBIG.
 Fabriquée à Trar-Bentos, Uruguay (Amérique du Sud).
 Les plus hautes récompenses aux grandes Expositions Internationales depuis 1875.
 HORS CONCOURS DEPUIS 1889.
RECETTE.
 Artichauts à la sauce brune. — Vous faites bouillir sur un feu très doux, pendant quatre heures, dans une casserole à feu doux, les artichauts, que vous avez, au préalable, lavés et essuyés. Vous ajoutez à cette eau bouillante, pour qu'elle soit plus épaisse, une demi-livre de beurre, du sel, du poivre et l'Extrait de viande Liebig, auquel on ajoute un morceau de pain de sucre de 10 grammes. C'est la meilleure manière de préparer les artichauts.
 Le nom de Liebig.
 L'Extrait de viande de la Compagnie Liebig peut seul être vendu sous son nom.
 (Arrêt de la Cour d'appel de Bruxelles du 6 Janvier 1891).
 So major les substitutions et des imitations et exiger la signature de **LIEBIG**, on envoie bien, on traverse de l'Étiquette.
Les Fantômes. — Une grande glace sans tain (transparente) est posée inclinée sur la scène. C'est qui représente le fantôme sous les planches est vivement éclairé et la scène par contre obscure. L'image du fantôme se présente alors aux yeux du spectateur sur la glace à travers laquelle l'acteur recule toujours visible.
 Publishers: Liebig's Company, Antwerp.

Fig. 16g: Back of Card 1 (French edition) Les Fantômes (Die Geister) Description of magic trick in red