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Article

Examining the Social Philosophy of Opium History: An ANT-Based Approach

Xianle Chen¹ [<https://orcid.org/0000-0001-5905-2102>]

Abstract:

This historiographical paper focuses on the social philosophy of opiate history to foreground the integration of Latour’s ANT in the analysis of drug memories as a methodological novelty. Specifically, this paper has three tasks to undertake. First, it is conveyed that a complete understanding of opium’s past requires a Latourian ontology orienting around the dissolution of nonhuman objects in human subjects. Second, through the accentuation of how factuality becomes the self-disappearing backbone of narcotic history by translation and inscription, this paper attempts to show an appropriate epistemology which intellectually corresponds to the said Latourian ontology of opium’s social recollections. Third, an ANT-based method is devised so that the drug’s sociohistorical realities can be reconstructed with the pharmaceutical and scientific information being textually invisible. Taken together, the take-home message is that social historiographers need to treat the narcotic’s past as an opportunity for broader interpretations of human souls.

Keywords: Social historiography of opium; ANT (actor-network theory); dissolution of objects in subjects; translation; inscription; textual invisibility of facts

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Introduction

When contemplating the opiate historiography, a reductionist comment from Plant’s 1999 book review for *Opium and the People*, which interestingly phrased the Victorian narcotic history as an “ambivalent relation between humanity and psychoactive drugs” has understandably caught the author’s attention (Plant 1999). In particular, what the book review said about the drug memories being our centuries long relationship with the “milk of

¹ Xianle Chen is a PhD research fellow in the Department of History at the Peking University. Address: NO.5 Yiheyuan Road, Haidian District, Beijing P.R. China 100871. Email: markchenxianle@hotmail.com

paradise” is, in my view, a key to comprehending the role of social historians in the articulation of medical humanities’ disciplinary significance. To be sure, existing literature on the historiographical development of pharmaceutical and medical histories prevents humanist studies of medicines and drugs (including those on the sociohistorical rationalizations of opioids) from gaining knowledge momentum because there is an overemphasis on science in the humanities of science that neglects human agency (Chen 2022). As such, there exists a need to “reconsider” the philosophical principles pertaining to the social makeup of the opium history discipline. Speaking as a specialist in narcotic sociology, I believe that we ought to take Plant’s preliminary construction of opiate reality as a system of reciprocally-interactive relations seriously.

However, before we formally begin exploring the application of Latourian philosophy in crafting the appropriate “research tools” for opium’s sociological history, a few paragraphs must be spent on what I mean by “the neglect of human agency” observed in the “sociocultural formulation of pharmaceutical and medical historiographies.” At face value, the current way with which the past of medicine is approached is exceedingly enough for medical humanities’ theoretical advancements should we accept the conventional and utilitarian wisdom that medical history complements medicine by being scientific and factual (Wailoo 2022). Perhaps this is the reason why some advocated for a data-centered clinicalization of pharmaceutical history by implying the nature of medical historians’ work as being “professional (Richmond and Stevenson 2003).” No wonder Rosenberg wrote that “the history of medicine was written by and for practitioners (1992).” Tellingly, his statement regarding the inseparableness of medical history and medicine (whose “expiration date,” in my belief, transcends the 19th century) reduces the epistemology of medical memories to a matter of solid technicalities which overly relies on the word-to-word reconstruction of quantifiable truths at the expense of historical insights’ inherent interpretive and spiritual qualities.

Frankly, the liberal use of positivist methods in probing pharmaceutical and drug histories should be met with some skepticism. After all, one’s ability to distinguish “the everyday practice of medicine” from “the humanizations and socializations of pharmaceutical memories” is crucial for the expressions of medical histories. Namely, the former which is concerned with the sciences of how chemical entities produce desired physiological effects has little power to unmask the non-numerical and qualitative patterns of human subjectivity. Therefore, in a historiographical sense, it is the latter’s underscoring of illustrating an interactive unity between ideological humanity and biopsychosocial facts that deserves a prominent position in the sociohistorical surveys for pharmaceutical substances.

Take opium history. Merlin’s 1984 treatise is a perfect instance of methodological positivism plaguing what would have been a model work for the sociocultural investigation of opiate memories if the volume of book’s scientific narrative had toned down (Merlin 1984). Instead, the publication of a book review in *The Quarterly Review of Biology* assumably indicates the extent to which botanists valued Merlin’s enterprise (Krikorian 1986). The irony is pretty self-explanatory given that the Hawaii-based scholar is actually a historian. In comparison, Kim reclaimed some academic authorities for the social historiographers of narcotic by employing a sociopolitical approach to portray the story of opium prohibitions in

terms of moral politicalization and colonial state-building (2020). Chiefly, the author wants to hammer home a message that, in order to put “historical elements” back to the drug’s sociological history, a constructionist (and therefore socialized) historiography is to be optimized against the agency of human souls in the making of human affairs.

Fittingly, having contrasted Merlin with Kim, we can see why Latourian philosophy is qualified to save drug historians from the “factual dilemma.” Explicitly, ANT which is a typical articulation of humanities has the theoretical strength to rationalize the spiritualization of opiate history dictated by *geisteswissenschaften*-based sociology. To be convinced of my proposal, let us first revisit what Helmstädter said in 2020 about integrating history with professional education and the absence of political elaborations for historical studies on pharmaceuticals (2020a, 2020b). His assertions tacitly corroborate medical practitioners’ long-standing beliefs that teaching history ensure clinical excellence (Peterkin and Skorzewska 2018; Wailoo 2022). With this in mind, we can see why Holloway wanted his sociopolitical assessment of Royal Pharmaceutical Society’s past to be a gift for “the future generations of pharmacists (1991).” He gauged the professional development of British pharmacy in a positivist fashion, the reason being that the subordination of medical history to clinical education entails scientific perspective. Thus, technicalities of pharmaceutical knowledge became Holloway’s focal point.

Likewise, supplementing healthcare leadership is again the end of penning an examination for opium’s social history. Afterall, narcotic recollections are thought to have a unique contribution to the science of drug control. In the case of Berridge’s endeavors over the years, discourses encompassing *Opium and the People* and a large quantity of essays have made policy recommendations for drug management their ultimate goal (1999; 2008). It hereby is imperative for the now renowned drug historian to spend countless paragraphs in her works on opioids’ medical facts (i.e., dosage forms of morphine and etc.). Hence, it won’t surprise anyone that some of her essays share similarities with experimental report by employing the grounded theory method to encompass sections for aim, method, results and conclusion (Anderson and Berridge 2000). In this way, the author continues to consider *Opium and the People* and other works by Berridge in views of medical curriculum and clinical positivism, although the British historian of drug has repeatedly affirmed her academic training as being strictly social.

On the whole, Berridge’s seniority may have been the source of an unspoken yet de-facto rule in today’s narcotic academia that, even if we are to frame a sociological explanation for opiate memories, the adoption of the medicine-centered methods reflecting healthcare professionalism is still a must. Since the 1980s, scholars like Harding, Hsu, Kingsberg and Yang have all unintentionally honored *Opium and the People* by producing different versions of opium’s social history in a manner that makes them remain committed to the “Merlin/Berridge tradition (Harding 1988; Hsu 2014; Kingsberg 2013; Yang 2021).” As might be expected, a preference for scientific factuality in all of these people’s works somehow undermines philosophical and sociological characters of drug memories that are inherently spiritual and ideological. Consequently, what we get is the loss of “human touches” in opiate history, which inescapably results from the continuation of the “professional style” for research writing despite some academics’ best efforts. For instance, while Harding never completely abandoned the pathology of opiate dependence in his exposition, the “science

of opium” obviously preoccupied Hsu’s attention (Harding 1988; Hsu 2014). As for Kingsberg, there has always been a tendency in her inquiries to spotlight the laboratory stories of opium which precluded her interpretations from contemplating sociocultural and sociopolitical significances of drug consumption against psychologism (See Kingsberg 2012). This generates a narrowness that confined Kingsberg’s explanatory scope to the professional history of opioid science, when in reality she desired to use narcotic memories as a gateway to understanding the broader philosophy of imperial politics. Moreover, Yang, in his expansion of existing scholarship on opium’s social memories, has expounded “the emergence of public health regime in Asia (Takayama 2023).” His endeavor to correlate drug reminiscences with the establishment of healthcare system in modern Japan is a classical example of how utilitarian historians seek to inform the theory of clinical policy.

Needless to say, the inclusion of scientific, pharmaceutical and medical descriptions for narcotic constitutes a main theme for the above-mentioned scholars. However, the accidental overemphasis of scientific positivism in the accounts of narcotic remembrances, which, as I understand it, is at odds with the research objective of Harding, Hsu, Kingsberg and Yang, will not facilitate the realization of opiate history as a product of psychologism. At bottom, the author seeks a social historiography of opium that, as illustrated by Kim, guides the *geisteswissenschaften*-based integration of drug memories and humanities without resorting to the retelling of our protagonist’s pharmacology and clinical physiology against the utilitarian causes. As of today, with the exceptions of *Empires of Vice*, few have met my historiographical expectation (Kim 2020). The highly celebrated intellectuals, including Trocki, Dikötter, Lee and Inglis have not escaped the narration trap in which the professional, scientific, pharmacological, pharmaceutical and chemical knowledge about our protagonist drug keeps marginalizing everything else in history (Trocki 1999; Dikötter et al. 2004; Lee 2006; Inglis 2019).

Along these lines, this paper seeks innovation and novelty by borrowing Latour’s constructionist practice to “re-imagine” the sociological historiography of narcotics. Primarily, my readership should appreciate how the historical ontology of opium’s social memories can be asserted as an ANT system comprising “the matter of human concerns” and “the matter of physical existences (Latour 2004).” What is more, it is essential for us to recognize a relationship reality where the materiality of opioids is submerged (and consequently dissolved) in the vast ocean of subjective humanity to form what I call the “Latourian core of an opiate remembrance.” Conceivably, the compositions of opium’s sociological history as a duality of subjects and objects existentialize themselves in accordance with an ANT law that “nonhumans are woven into the fabric of the social relations (Jackson 2015).” Hence, objects (i.e., the science of opium) are subjugated to things (i.e., the humanity of opium). For my readership, such take on social history of opioids is to foreground the centrality of human agency. On this account, we can then consider the epistemological intellectualization through which the sociohistorical story of the narcotic is recounted in light of opioids’ human-dominated interactions with milieux. Put simply, interpretations about the sociocultural knowledge of opiate history ought to be premised upon the actuality that the technical information of opium (i.e., Latourian objects) is dispersed in our perceptions of drug use (i.e., Latourian subjects) to make itself “disappeared” in the process of becoming the “backbone” of drug’s social history. Accordingly, a

methodology must be formulated to accentuate the “textual invisibility of opiate facts” which, if accomplished, will appropriately contribute to the humanization of drug memories required for the social historiography of opiates. In short, this paper is aligned with a view that, so as to make the historiography of opium sociology feels “less clinical,” a philosophical framework is to be used for the invention of a new analytical instrument that underlines the art of doing history as the qualitative exploration of humanity’s non-numerical soul.

Lastly, I have the responsibility to explain why this paper utilizes philosophy in the historical assessments by commenting on the essence of history and the latest developments in China’s pharmaceutical historiography. Three decades ago, Lorenz dissertated about how “doing history is a more philosophical activity than most historians realize (1994).” By extension, “historians can profit from philosophy because ‘doing history’ can be improved by philosophical insight (Lorenz 1994).” More importantly, a recent trend of theoretical advancements in the Chinese historiography of medicine and pharmaceuticals has signaled a human-centered approach to the memory evaluation of pharmacological entities against a sociocultural backdrop. Especially, Yu has already demonstrated the innovative potential of a research functionalizing philosophical methods to inquire about psychological and sociocultural questions well beyond the “professional debates” on the history of traditional Chinese medicine (Yu 2022). Taken in tandem, the rational discernment exhibited by a competent historian is deeply rooted in the recognition of a fundamentality that the story of the past is, first and foremost, a story of how humanity metaphysically and mentally responded to objectivity. Evidently, only a constructionist thinker (i.e., a competent historian) who characterizes historical discussions with deductive reasoning to address the psychologism of human-made history is able to identify the spiritual quality of remembrances, thereby subtly unearthing the inexpressible truth about minds and thoughts hidden behind the textual information and physical artifacts. Thus, the application of ANT in the historiographical research concerning the “guidelines” for doing social history of drugs is an inevitability which should be welcomed if we are to help “humanism” and “constructionism” rightfully regain their centrality in the studies of what it is basically the memory restoration for our “ambivalent relation” with the narcotic.

Ontology of Opiate History: Dissolution of Objects in Subjects

For the ontological appreciation of history, certain disciples of neo-Kantianism tend to stress the importance of embracing the idiographic representation of mankind’s collective recollections. According to Windelband, history exists due to the individualization of unique and singular entities that is in no way compatible with the nomothetic framing of scientific and factual reality (1998). Such characterization of historical ontology will serve us well in our undertaking to functionalize ANT for developing the humanized and constructionist historiography of opiate sociology.

In the main, this paper sees history as a solution produced by the solvation of objectivity in human psychology. Suitably, Windelband’s neo-Kantian descriptions of an idiographic ontology for history enlightens us on this exact point. Straightforwardly, every historical occurrence can materialize only if Latourian objects act as the “flavored syrups” dissolved in the Latourian cocktail of sociotechnical system. To clarify, disregarding the



functionality of physicality in the ontological actualization of history is not what I am saying. Rather, the author simply wishes to establish that, as a way of making historical reality to become existent, factuality must be subordinated to our mental faculty. Just like the syrups flavoring a variety of alcoholic mixed drinks, quantifiable data in historical memories is indispensable in shaping the phenomenological layouts, but it always occupies a secondary and unobservable position in the overall exchange of agencies with human ideas to eventualize the experience of time evolution.

This could not be more true for the social history of opium when it is probed in the context of sociology's intellectual exposure to ANT. As noted by Mills, Latourian critique understands key concepts in social studies, such as capitalism, power and classes from the perspective of what the father of scientific constructionism called "the effect of translations (2018)." By implication, for the sociological memories of opioids to endure in the ANT universe, we must accept the human domination of everything in the ontological recounting of sociohistorical tales. Nevertheless, I should differentiate myself from the Latourian fundamentalists for the purpose of showing how the intrinsic qualities of narcotic's ANT-based social history are characterized by the dissolution of nonhuman objects in human subjects. Predominantly, this paper agrees with Chen's revisionist argument that reinterprets hybridity (2023). That is, in the post-truth era, the theoretical strength of Latour's scientific constructionism is about optimizing the dualist handlings of subjectivity and physicality in the reality blend. It is this point upon which the author innovates by explicating the relationship coexistence of "opiate objects" and "opiate things" in respect of having materiality (the solute) "dissolved" in humanity (the solvent) to make a Latourian solution of drug's social history.

Figuratively, human concerns, as the "base spirit," take the centrality of mixology whereas scientific technicalities are the mere "syrup" determining the "taste profiles" for our sociohistorical cocktail of opioids. Even though they are equally important, syrup is nothing without getting itself solvated in an alcoholic base. Just to give you an idea, *Anxious Times* (Bonea et al. 2019), which is a book about the social and cultural histories of Victorian medicine, comes close to restoring the idiographic ontology of pharmaceutical memories by designating the clinical information (i.e., dissolved syrup) as the imperceptible substructure of what Micale (See back cover of *Anxious Times*) termed "the interconnections of technology with society, religion, government, and family life (i.e., base spirit)." Ultimately, the historiographical takeaway is that we will find out how the humanist factors have the "final say" in the existentialization of narcotic history's social ontology by observing them through an ANT lens. In brief, the conceptualization of an interactive relationship between objects and things as a dissolution gives rise to the ontological actuality of medical entities transpiring in the epochal developments of human affairs such as societies. To reword, factuality is "thinned out" in the historical milieu, where our attitudes and perceptions toward the drug have long been shaping the overall fabric of opium's past.

At this point, we are ready to have some practical examples of what object/subject arrangements are to be articulated by the Latourian theorization of opioids' sociological memories. In 1833, a British surgeon named Edward Jukes recorded in his notebook the potency of opiate medicines in treating spasm (Jukes 1833). Preeminently, what we need to take into account about this artefact is that its uniqueness and significance came from the

personal and psychological input of a known figure in medical history. Though the notebook has an abundance of experimental and clinical data, it is the humanization of Jukes' knowledge that defines the fashion in which the concrete permanency of opiate's "being qua being" becomes existent in the historical reality of sociology. In Latour's language, two actors exist for us to uncover the ANT-based ontology of narcotic's social history through reading the 1833 notepad, with drug science being the opium object and Jukes' textualized rationality being the opium subject. Registering in our mind that the dissolvment of the British surgeon's experimentalist practices in his humanity has bestowed upon the "spasm treatment notebook" a Latourian mark of being which helps us unfold the very nature of the social history of opioids. Otherwise, we will most likely to omit the ideological aspect of how drug physicality has induced mankind to interact with it in the process of punctualizing ANT systems for historical milieux. Resultingly, the ontological framing of the opiates' sociological past needs to reflect a relationship organization that, by following the dissolution mechanism, the medical materiality of opium "blends" with subjective factors to produce a Latourian solution of social opium history. And the quintessence of Jukes' clinical notes is not found in numbers and facts, but the ways in which the mind of the Victorian physician "reacted" with these narcotic technicalities.

Similarly, we can employ the "solvation critique" to recreate the sociological ontologies for William G. Smith's 1832 dissertation on opium and James Young Simpson's report of utilizing laudanum inhalation as a remedy for vomiting during pregnancy (Smith 1832; Simpson 1855). Once again, the questions of being, becoming and reality for the social historiographers of opioids are not about the pharmaceutical and positivist information laid out in these two texts. It is the dissolving of professional knowledge in Smith and Simpson's sociocultural identities that conforms to the law of ANT universe. Honestly, there is no necessity for us to relate the medical reasonings documented by clinical practitioners in the sociohistorical structuring of narcotic memories. Judging by what Rosenberg proposed in connection with "a new history of medicine incorporating and integrating social, cultural, and economic aspects of life (1992)," Latourian historians of drugs should come to an agreement which respects the ontological status of opiates' textualized past (e.g., "Smith dissertation" and "Simpson report") as an interplay arrangement of actants marked by the dissolution of objects in things. Thus, when we inspect artifacts in the sociological history of opium that are filled with scientific facts and technical theorizations, the key point is to remember how an ANT-based approach of constructionism recognizes idiographic and psychology-dominated interactions of materiality and subjectivity to be the "being qua being" for a time evolution involving medical data as well as imagined ideologies.

To cut a long story short, it has been an overdue acknowledgment that narcotic's social history and the histories of science and technology in general deserve what neo-Kantians refer to as the particularity approach of *Geisteswissenschaften* (Jensen 2013). The insistence on placing humanity and psychologism at the center of theorizing historical realities by Windelband and Rickert which privileges constructionism over positivism can illuminate the pharmaceutical historians to pursue the adoption of humanist and interpretive methods in the studies of opioids' sociocultural memories. Certainly, Rosenberg's effort to have a "multifaceted" expression of medical history points us in the right direction (Stevens 2008). Taking one step further, this paper combines the social historiography of opiates with

Latourian philosophy to depict the so called “multifaceted histories of pharmaceuticals, medicines and substances” in conformity with humanization and spiritualization. To achieve this, the author has introduced the readership to the ANT-based descriptions of opium’s sociohistorical ontology. Such descriptions call for a hybridity reconsideration that visualizes the dissolvment of objects in things through the dualist marriage of materiality and subjectivity. To put it another way, there is no subject/object unity to begin with. The essentialness of narcotic’s sociological history for which Latour’s revisionist disciples would have related is tantamount to a “reality cocktail” made by the alcoholic artistry that produces unity from the well-defined object/thing division. In the matter of contextualizing such “philosophical adjustment” in the actual probe for the ontological characteristics of our protagonist drug’s ANT-based social past, we are expected to demonstrate the critical capability which views sociological notions like class, structure, interconnections and behaviors as being distinguishable by Latourian understanding of how nonhuman actors are dispersed in human actors.

By way of illustration, George Shearer’s 1881 book for opioid indulgence and its cure is significant for sociocultural historians of drugs and addiction if the ontology of this monograph was given an ANT representation that zeros in on the “human consciousnesses” of classism, society and culturalism hidden behind the paragraphs reporting the medical information for “opium treatments (Shearer 1881).” Separately, a 19th-century ink drawing of “opiate takers relaxing in a Chinese opium divan” should pave the way for us to begin ontologically contemplating a system of physicality/spirituality interactions where the painting’s technical accuracy of portraying drug addicts (i.e., the narcotic physicality) and the artist’s intention in sketching the Chinese opium divan (i.e., the narcotic spirituality) go hand in hand to create a reality blend of which substance dependence is immersed and solvated in historical racism (Painter not identified, 1800-1899).

In outline, as with Fox’s contention for the “sociocultural invention of medicine,” the social history of drugs is fundamentally a dissolution process that has humanity, when acting like an engulfing solvent, to determine the solubility of a solute represented by medical information (Fox 2020). From a physicist’s standpoint, it wouldn’t be very useful if the study of dissolvment is fixated on the soluble. Affirmatively, the same can be said about the sociological ontology of narcotics. Therefore, Berridge was absolutely right for saying how she kept “the technical language to a minimum” in the writings of *Opium and the People* (Berridge and Edwards 1987). Yet, scientific chapters are nonetheless included in the book, thus indicating a gap between her ontological comprehension of opium’s social history and her approach to the narcotic’s sociohistorical epistemology.

Epistemology of Opiate History: Translation, Inscription and Factuality Backbone

In a different sense, the “cocktail metaphor” can be used for one more time. The sociocultural purpose of drinking gin and tonics and its likes is never fulfilled by reading and memorizing the esoteric list of ingredients. We get satisfaction with consuming the alcoholic mixed beverages because the materiality of ethanol is dissolved in mankind’s social makeups to grant the cocktail-ingesting behavior a grand and ceremonial sensibility for art and culture.

Candidly, the biochemistry of alcohol gives way to socialization, culturalization and humanization of Bond, dramatically sipping Martini in the epistemological framing of mixology even though what we drink at bars always requires the science of fermentation to exist. By and large, technicalities are secondary to their humanist and sociological add-ons in our “cocktail metaphor” explaining the epistemological organization of relationships for objects and things.

Feasibly, lessons learned from perceiving cinematic centralization of the British spy’s fondness for the “gentleman’s drink” as the whole of mixology’s materialization can also be applied to the sociohistorical philosophy of opioid knowledge. In 2021, Yu attempted to construct an “observation window” for the assessments of societal structure, culture, and ideas by meditating on the Chinese history of diseases (Yu 2021). In relation to this paper’s proposition, his attempt to integrate pathological recollections of disorders with the whole of the general past reflects Rosenberg’s multifaceted approach to medical history. By means of deduction, like the “cocktail metaphor,” the final representation of pharmaceutical memories ought to surpass the clinical realm. Epistemologically, it needs to regress back to what Fox interpreted as the historicist imagination of medicine (2020). In other words, we have to limit our discussions over modern professionalism and clinical factuality and do medical history as if we were the laymen living in the broader past of a comprehensive world.

To cite an instance, Rangaku (Joshi and Kumar 2002) began its life in Tokugawa Japan as a joint effort by Japanese scholars to learn Western sciences (with a special emphasis on Dutch medicine). However, this Samurai-turned-intellectuals’ acceptance of foreign technologies by linguistic means soon became the enlightenments of westernization, revolutionization, and ideological liberalization that eventually ended Edo shogunate’s feudal regime (Jansen 1984). From the Latourian angle explored in my paper, the historiographical epistemology of Rangaku denotes a spiritualized past of medical technicalities which has been inherently humanized, socialized, culturalized and politicalized via the solvation of objects in subjects. It is of no reason to think that the knowledge theory for opium’s social history is somewhat different to what historians has done with the appraisals for elucidating the factuality-exceeding instrumentality of Dutch studies in profoundly transforming the traditional Japanese society.

As Dikötter and his co-authorship were quoted as saying in 2004, “another important aspect of the opium myth which needs to be questioned is the narrow concern with the presumed pharmacological properties of the drug, stripping opium use of its cultural meanings and social dimensions (Dikötter et al. 2004).” Relevantly, their remarks about the “narrow concern” in opiate history is something that focalizes my argumentation to conceptualize a Latourian epistemology for narcotic’s social historiography. Explicitly, when ontologically analyzing opioid’s sociocultural memories in the ANT framework as being a dissolvement of objectivity in subjectivity, we must employ the constructs of translation and inscription which, at an epistemological level, logicalize “the molecular mechanism” illuminating our appreciation of how drug sciences are practically “thinned out” in the humanity to produce the sociohistorical solution of relationship-based reality. To encapsulate, this paper holds the belief that, to truly mirror the “dissolution metaphor” for the Latourian ontology of opium’s social history, it is required of us to use the epistemology in a way that intellectually elaborates why factuality should become “the self-disappearing backbone” of

the narcotic's sociocultural past through historians' translating and inscribing of technicalities during the spiritualization of medical remembrances. Plausibly, this is what we can do to restore "cultural meanings and social dimensions" back to their rightful places in the sociocultural recollections of drugs.

Appropriately, an essay by Shiga provides us with some realistic conveniences for formulating pathways to achieve this paper's historiographical vision (2007). By rationalizing "a theoretical basis for re-orienting historical and cultural studies of artifacts towards the many crossovers and exchanges with nonhumans," we are able to see the "philosophical usefulness" of ANT which facilitates us to make sense of opiate relics' "durable forms of social interaction (Shiga 2007)." In plain English, the author aims to show an epistemological judgment that, to duly display the dissolving of the narcotic materiality in the human psychologies in our figurative expressions for the "being qua being" of opium's social memories, translation and inscription are highlighted to explicate the Latourian progression of opioid pharmacology from the "textual contents" to the "overall and self-disappearing spine of the drug's sociohistorical narrative."

In reality, the sociological philosophy of knowledge for Thomas De Quincey's 1821 *Confessions* has been nothing more than the paradise milk's human-dominated interaction with cultural minds (2013). The absence of clinical debate for the English romanticist's substance abuse is too insignificant to determine our humanist theorizations for what we can grasp about the sociocultural epistemology of narcotic history. In De Quincey's own words, "I thus give the reader some slight abstraction of my oriental dreams, which always filled me with such amazement at the monstrous scenery, that horror seemed absorbed, for a while, in sheer astonishment (2013)." Here, the question of *Confessions'* historical significance is not so much clinical as spiritual. The "abstraction of opioid-induced dreams," "fantasy" and "strong emotions" molecularly punctualized by the ANT-based solvation of narcotic pathology (i.e., an object) in mankind's psychological capacity (i.e., a thing) create the human-dominated texture for the spiritual knowledge of drug's socialized and culturalized reminiscences. Therefore, Latourian thinkers will surely know why the epistemological inquiries about the past of this infamous addiction literature should be given a particular attention to its author's personal and mental interactions with opiate entities. It is to discover the molecular law of fundamentality for opium social history's "dissolvement ontology" in the constructionist universe of Latour's scientific epistemology.

In *Pandora's hope*, the father of science and technology studies recalled a 1991 expedition to Amazonia during which he closely observed the manufacturing of "forest examination" by a multidisciplinary group of academics from "collected samples" to "written texts (Latour 2000)." To him, indications were clear that factuality underwent translation and inscription to become existent in the form of "human fabricated paragraphs." Bringing this back to our debate, my readership can then philosophically comprehend what we can perceive when historically exploring the formulation principle for knowledge and information presented in De Quincey's writings. Specially, the *Confessions'* coming into being in the sociocultural memories of narcotic is matched by an epistemological operation wherein drug historians ought to deploy the humanist techniques of having addiction's medicalization translated in and inscribed on the generalization and spiritualization of the socialized, culturalized and politicalized histories. Ergo, we can now get a rough idea for

Rosenberg's multifaceted reality of historical milieux in which opioid sciences are fully solvated in the knowledge solvent of subjectivity by transcending into the intangible yet ubiquitous backbone of what contemporaries (like De Quincey) could sense about the pharmacological and biochemical actions of opium inside their bodies and minds from the non-professional viewpoint.

To expand my postulation, we shall take a look at Alonzo Calkins' book on "opiate appetite (1871)." Unlike one's comradeship in the circle of medical history, I will survey the social, cultural, political and ideological subtleties within this late 19th century discourse by reading between the lines. Plainly, the objective is to bring into focus the ANT system whereby Calkins artificially manipulated the pathology of drug misuse to translate "the circulating references" into the inscribable words. Resultantly, our task, as Latourian theoreticians, is to study how the wordsmith of *Opium and the opium-appetite* registered narcotic technicalities in his mind to produce the relationship solution of opiate facts and humanity. Correspondingly, the same can be done with William Alexander Francis' article for "opiophagism, or, psychology of opium eating (1875)." Being comparable to what Latour and Woolgar saw in a research laboratory at the Salk Institute (2013), we must undertake a journey to scout out translations and inscriptions by which Francis mobilized his sociocultural beliefs to compose a lengthy report about subjective interpretations of drug dependence's medicalized data. By the same token, the exposition of opioid smoking by Benjamin Broomhall should be approached with considerations on the Victorian Missioner's sociopolitical and religious standings (1882). In the end, the ANT-based epistemological understanding of opiate artefacts' historical sociology is intellectualized in a relationship reaction that results in narcotic physicality dissolving itself in narcotic mentality.

Hence, positivist traditions, which mechanistically minimize relevance of idiographic representation of our past, are not very well-suited for the humanist campaign to historically explain "people as a creature of ideology." Let us revisit Jukes' clinical notes for one last time. Jackson investigated it to illuminate us about the professional and medical importance of pharmaceutical history (2005). His experimentalist style of narration confined the research to a "naturwissenschaft mindset" that shied away from metaphysically discussing Jukes as a soul-based individual socialized and culturalized by the milieux. Put differently, Jackson dismissing the constructionist quality of drug memories is regrettable. As it happens, Chinese historiography in recent years has, in large part, increasingly begun to concur with the suggestion which amounts "doing history" to "doing interpretive art of geisteswissenschaften (Xin 2018)." Even Berridge admitted how the remembrances of narcotic are to be defined by its sociocultural dimension (Berridge and Edwards 1987). At the end of the day, the Latourian knowledge theory for the social recollections of opioids is a recognition of information by explainers of history that excels medicine-centered positivism's word for word reconstruction of historical reality with the aid of spiritualization. We must acknowledge the molecular level at which ANT-based constructionism conceptualizes opium's sociological epistemology as the translation of medical facts from solid science to our perceptions and attitudes (Berridge and Edwards 1987).

Finally, the author is obliged to elucidate why Latour's hybridity is reconsidered in this paper. Throughout his entire career, the French philosopher of science and technology studies had again and again underlined subject/object unity (Latour 2000; 2013). He dedicated

an almost whole chapter in *Pandora's hope* to lamenting against the separation of objectivity from subjectivity (Latour 2000), the reason being that we will encounter the critique dilemma known as “the brain in a vat” if the duality of physicality and mind is taken to be the absolute rule of universe. Upon insisting subject/object division, people will not be able to “experience” the life with a degree of reality intimacy which is necessary for us to fully understand our world (Latour 2000). That “intimacy,” as maintained by Blok and Jensen, is only realizable by interactions which simultaneously bind everything together (2011). Whereupon, we derive the conviction of hybrid constructionism to describe the Latourian views of knowledge and universe.

Be that as it may, the author has some reservations about how Latour rejected the divorce of objectivity from subjectivity by comparing it to the cynicism of vat-embodied perception. For one thing, the organ that science deems to be the center of emotions, intelligence and senses is ideological in addition to being biological. Deductively, regardless of whether the brain is in skull or not, our consciousness of externality's presence is in effect the dissolution of neurons (i.e., an object) in psychologies (i.e., a thing). Besides, the purity version of ANT also helps us combat against conspiracy theories inspired by extreme relativism (Chen 2023). In association with the knowledge theory for opium's social history, Latourian historiographers may appreciate the importance of what I just said about the readjustments of ANT in recognizing translation and inscription for making factuality the backbone of narcotic's sociocultural memories.

Methodology of Opiate History: Textual Invisibility of Facts

The training that I have received as a pharmacy student from a British university gives me the first-hand and insider experiences that the healthcare institutions in the UK generally treat medical history as a method to ensure clinical leadership. Pharmacists have utilitarian cause to promote competency, authority and professionalism by studying the past of medicine (Appelbe and Wingfield 2013). To capsulize, because the remembrances of medicine are essentially add-ons for the patient-centered care, their methodology is evidence-based to maximize the scientific qualities of the therapeutic services delivered to the unhealthy. Expressly, the social past of opioids is employed for the policy improvement of addiction management which categorically is an affair for the clinicians. In consequence, the practice by which drug historians tackle the narcotic's sociocultural recollections frequently neglects the humanistic and interpretive thinking that breaks with numerical and factual reasonings. Such positivist methods restrict the potential of opium's sociological history to supplementing the bedside rapports with substance misusers.

Of course, there is nothing bad about using the social memories of opiates as a means to upgrade the professional skills of the medical practitioners. I am merely inviting some second opinions on the overuse of data positivism in the historical research which inhibit us from spiritually elevating our understanding of everything in the past (including drugs) to a philosophical level. Pointedly, the inflexible determination to make medical and pharmaceutical histories as scientific as possible is trivializing the study findings. The analogy to this can be a hearsay widely circulating in my department that tells a tale of how a PhD dissertation utilized statistical models to explicate the quantitative inferiority in heavy weapons as the main reason for Hitler to lose the Battle of Kursk. Seeing that mathematics

of statistics is methodologically demanding, the conclusion about the Germans lacking tanks and artilleries is, to say the least, underwhelming and oversimplifying for construing a turning point of World War Two.

Contextually, however, the results of deploying equations and functions in medical history, so to speak, are acceptable if we resolutely and overwhelmingly consider the past of clinical world as a way of solely reinforcing therapeutic efficacy. This is clearly to be the case for the sociocultural memories of narcotic when culturalist and sociological historians of drug in the contemporary including Kingsberg and Hsu are following Berridge's footsteps by not pivoting away from the science-centered approach (Kingsberg 2013; Hsu 2014). Whence, as pages are spent on the documentations of laboratory and pharmacological entities (just like what Kingsberg and Hsu did), the notion of having opium's social history to facilitate leadership and practice developments prevails.

Thus, one envisions a history of opium without the actual science of opium. The methodological betterment which spiritualizes the sociohistorical framework for the milk of paradise to duly paint the panoramic picture of recollections is in urgent demand. But the secret to the successful improvement of methods is to be found in Thorstein Veblen's 1899 *The Theory of the Leisure Class* in lieu of Peters' inquiry for "the British medical response to opiate addiction (Veblen 2019; Peters 1981)." Forthrightly, the American sociologist functionalized the historical reality of opium use to construct a theory for conspicuous consumption which is intrinsically humanistic (Veblen 2019). Emphatically, he referenced whatever our centuries-long associations with the drug transpired in earthly domain to phenomenologically interpret the overall patterns of societal developments and human interactions. To paraphrase Yu, pharmacological and pharmaceutical histories offer a new "peephole" for historical, theoretical and metaphysical contemplations (2021). By virtue of his statement, the medical factuality needs to gain spiritual transcendence before we can observe sociocultural reminiscences of narcotic. Through the prism of clinical data, we, like Veblen, advance our comprehension of humanity, minds and emotional psychologies against the historicization of milieux. Notably, when Berridge asked for journal editors' help to gather highly technical testimonies of pharmacists practicing before the 1920s, she probably missed the "peephole philosophy" of how we can do opium's social history in a soul-based manner (1977). In substance, what we see in the door viewer is vital, not because it is the multifaceted entirety of the outside world, but because it is the gateway leading to the said entirety.

Demonstrably, by devising a novel methodology, I encourage my readers to envisage a possibility of producing a historical analysis of opioid sociology that makes light of addiction science. In doing so, we can uplift the explanatory capability of opiate's sociohistorical significances to transform the medical history into a unique and powerful tool to decode humanity's spirit-centered phenomena. This is why ANT comes into play.

The classification of Latourian thinking as a constructionist philosophy gives us the supposition to holistically examine the social reality of the narcotic's humanity-centered and all-inclusive past. Markedly, the father of science and technology studies had once said that "the notion of network allows us to regain margin of manoeuvres for society's wholeness (Latour 1996)." His methodological clarifications were consistent with how Rosenberg appreciated medical reminiscences' sociocultural complexity and comprehensiveness.

Pertinently, Prout's research of evaluating ANT's application potential in the pharmaceutical sociology is accompanied by an assessment which makes use of Latour's analytical craft in exploring the "implementation of information technology developments in healthcare (Prout 1996; Cresswell et al. 2010)." In principle, I agree with both essays' implicit stance on the all-encompassing feature of medicine's sociohistorical universe requiring the input of ANT. Yet, in detail, I diverge from their causality views about technologies generating and then shaping social relationships. By referencing the "peephole philosophy" again, I would like to reiterate Latourian objects' secondary position in the making of our collective memories. If anything, materialities such as pharmaceutical and pharmacological properties of opium existed in the past of this world only when they were dissolved in the ideological solvent of humanity's sociocultural associations.

Methodologically, I envision a textual invisibility of facts to address the narration challenge for writing an ANT-based history of narcotic's sociocultural realities in the shapes of humanization and socialization. Principally, what we said about our protagonist drug's ontology and epistemology (i.e., dissolution, translation and inscription) require us to have the memories of medicine spiritualized in the fabric of all-embracing phenomenology for the sake of making Rosenberg's multifaceted historiography theoretically visualizable. Hence, I coin the term "textual invisibility of facts" to illustrate how Latourian philosophy aids the methodology development for opioid's sociohistorical articulations that expands the explanatory scope of medical reminiscences beyond positivist physicality of science and technology. The point is to try eliminating the visual constraints imposed on us by a door viewer, if you will.

To exemplify, Sir William Muir's minute on opiate revenue should not compel the researchers to generously spend inks on the technicalities of imperial taxation policies, drug economy or opium's botanical categorizations (1875). Alternatively, we can utilize what Prout called the "relationship materialism" to treat this piece of opioid text as a knowledge refinement for the existing sociopolitical theories, the parallel of which is to be found in the *Empires of Vice* (Prout 1996; Kim 2020). Manifestly, by stressing how sociocultural associations are determinant for the tangibility of the tangibles, we can approach the questions regarding narcotic-derived human affairs (including but not limited to clinical sociology, opioid politics and medical morality) with ANT-centered theorizations of delegation and transmutation which, if done correctly, will methodologically permit us to gain interpretive and spiritual transcendence for Muir's document in the same way as Kim taking bureaucratic records on drug consumption in colonial administrations to a whole new level of comprehensive explanations.

By contrast, what Sir Alexander John Arbuthnot wrote in relation with "opium controversy" does not compel us to obtain the abundance of technical reporting (1882). It is the book delegating medical function to Arbuthnot's descriptions and the subsequent transmutation of addiction medicalization from science to ethics that we, the Latourian thinkers, should be concerned about. To rephrase, as long as humanity is involved in the presence and continuance of a constructionist world, materiality (i.e., nonhuman actors) exist when they are surrounded by sociocultural relationships (i.e., human actors). For a methodologist like me, the application of ANT in the examination of the British official's 1882 treatise means textually thinning out the therapeutic information of substance misuse for

the intellectual maximization of humanist explications which truly reflects the multifaceted matrix of opioids' Latourian relationships.

Furthermore, I would like to point out that the recipe for the "textual invisibility of facts" is to write factuality without laboriously laying them bare. Therefore, one can recreate the sociohistorical and ANT-based reality for opiates by not penning about pharmacology and relevant sciences. In practice, Benjamin Fossett Lock's discourse for "opium trade and Sir Rutherford Alcock" typifies this if drug historians start to "sidestep" clinical discussions (1883). By identifying that the physical being of narcotic factuality recorded in Lock's publication is based on the literary extension of humanity's sociocultural interconnections (aka the lexicon manifestation of relationship materialism), Latourian historiographers could prioritize the exploration of historical milieu to give us a wider view on the wholeness of society. To a large extent, the "drug angle" from which the insightful and exhaustive inspection of the 1883 booklet emerges must be deeply embedded in the research texts to the point of having the scientific facts to become almost indiscernible so that objects and things can fully play their parts to display the multifaceted complexity of what Lock engaged in the opioid realm to punctualize the ANT-system in the guise of the written paragraphs.

Bluntly, the Latourian philosophy of doing opium's social remembrances should observe the methodological principle that calls for the "textual invisibility of facts" to practicalize the aforementioned metaphors of dissolvment, cocktail mixology and peephole viewing in the ontological and epistemological spheres. To epitomize, Donald Matheson's rationalization of 19th century drug trade is to be approached in two parts (1857). First, we need to dynamically expound how Matheson's personal beliefs (i.e., a thing of ANT) were associated with opiate consumption (i.e., an object of ANT) in the writing of his book. Second, there is a cause for us to gauge why this Victorian textual exposition is reflective of a sociocultural transformation in every aspect of British public in mid-19th century. When viewed together, my readership can begin to appreciate the all-inclusiveness of human world for which the relationship materialism methodologically promoted by the "textual invisibility of facts" shapes the reconstruction of opioid's sociohistorical reality. In a way, opium history itself becomes a perspective so that ANT can portray the historical wholeness via the identification of soul-based humanity in the theory of assemblage.

In summary, this paper now returns itself to Plant's reductionist understanding that the history of narcotic is always about how we have shared our "socio-technical relationships" with the milk of paradise in the empiricist evolution of time (Plant 1999; Prout 1996). To speak like a Latourian revisionist, the materialist actualization of objectivity in an ANT system depends on the interchange of agencies betwixt sociocultural factors (i.e., a matter of human concerns) and factuality (i.e., a matter of nonhuman physicality) with the human concerns taking a central role in the said exchange. Expressed differently, in the sociocultural history of opioids, the science of drug is meaningfully existent only if it is "molecularly" solvated in the solvent of ideological entities by way of socio-technical interactions. Hence, the studies to show the wholeness of opium in the sociohistorical reality are founded upon an ANT-based methodology which emphasizes relationship materialism to advocate for the textual invisibility of facts in the narration of narcotic's sociocultural reminiscences. For historical methodologists, the sociological entirety of opiate's past should be recognized as something that would surpass the positivist door hole.

Concluding Remarks

From the outset, I have strived for the realization of what Rosenberg termed “the multifaceted history of medicine.” Reading Plant’s book review and Latour’s works on ANT has done nothing but encourage me to revitalize the social history of opium with a historiographical survey of scientific constructionism and historical humanization in the name of the American historian. The goal is to illustrate the fact-transcending comprehensiveness of drug’s sociohistorical constitutions by functionalizing Latourian philosophy to analyze the ontology, epistemology and methodology of narcotic’s sociocultural memories as the spiritual products of relationship materialism. To this end, I have accentuated the dependence of things on objects in our socio-technical interrelations with opioids. In the ontological inquiry, I have described the dissolution of opiate factuality in opiate humanity for the social recollections of drugs to come into being. Complementarily, this gives us a knowledge theory that positivist data about opium become self-disappearing backbone for an ANT-based history of opioid sociology via translation and inscription. Eventually, all of these probes culminate in a methodological judgement which promotes the textual invisibility of facts to overcome the visual constraints forced upon us by clinical leadership. Mainly, this paper argues for the centrality of “relationship” in the “relationship materialism” of drug’s sociocultural remembrances. Without human interactions (aka Latourian things), opiate physicality (aka Latourian objects) is historically meaningless. In regard to my “recalibration” of Latour’s framework, I have presumed that the readjustment of ANT hybridity is acceptable to build the basis of how this paper theorizes. Understandably, Latour expected his metaphor of mug and can to reinforce subject/object unity, but the contrary was true (Latour 2004). Metal cans are also a dualist marriage of things and objects because, like the crafting of a mug, there is a subjectivity in the can-making when they are designed by human beings. In a nutshell, for the wholeness of opium’s social history, a Latourian historiographer ought to contemplate about the dominating role of humanity against the positivist facts in the socio-technical relationships in the wake of how the ANT framework is inherently characterized by subject/object division.

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