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[E-Cigarettes and the "Civilising" of Smoking]

Abstract: This paper explores the ascendancy of electronic cigarettes as part of a wider set of processes involving the "civilising" of tobacco use. I centrally argue that the growing popularity of e-cigarettes can only properly be understood when placed in the context of a broader set of historical developments that have centrally involved the "sanitisation" of smoking. In relation to this undertaking, I explore the curious convergence between devices which are intended to stop smoking (nicotine replacement therapies) and technologies designed to keep smoking (electronic nicotine delivery systems). I argue that regulatory and classificatory distinctions between nicotine "therapies" and "drugs" have increasingly come to collapse, highlighting the importance of exploring the social and psychological uses of tobacco in understanding, and informing, policy debates about tobacco regulation. The paper centrally draws upon the work of Norbert Elias and his concept of "civilising processes". Where many analyses of changing patterns of drug use, consumption and regulation adopt the lens of medicalisation, this paper explores the utility of Elias's key concepts in explaining long-term transitions and developments in the practice.

Keywords: Smoking, Civilization, Regulation

Introduction

My over-riding question for this paper is a classic process sociological one: *how did this come to be*? More specifically, how and why have e-cigarettes become increasingly popular? More fundamentally, I am interested in the question of how tobacco came to be consumed as, essentially, a nicotine solution that is "vaped". How, to put it provocatively, did smoke come to be erased from smoking?

My core argument is that in order to understand the ascendancy of e-cigarettes it is necessary to have a look at the long history of tobacco use in order to make sense of present-day practices. This is consistent with a sociological position which draws much from the work of Norbert Elias (see Elias 2012): that social reality can only be properly apprehended as a set of long-term processes, and as such, we should avoid a "retreat to the present" without any sense of how this came to be.

Following from this position, my starting point is that tobacco use – what tobacco is understood and employed to do to and for the people who consume it - fundamentally shifts over time. By this I mean that material tobacco (the plant, how it is cultivated, cured, processed, and otherwise modified); the primary mode of its consumption (e.g. whether it is smoked or chewed); the practices and understandings surrounding its use (the rituals, the applications, the cultural associations); its purposes (the functions it is understood to perform for a user); and how its effects are experienced by users (the feelings generated by its consumption and how these are perceived), must

all be understood as long-term processes, not fixed "categories" that we can take as "given". Thus, significantly, while it is now common to use the term smoking to refer to the consumption of tobacco, it is noteworthy that a number of substances - phencyclidine (PCP), methamphetamine, crack cocaine, opium, cannabis, etc. - have characteristically been smoked as the primary mode of their consumption. Conversely, over the last few millennia, tobacco has been licked, blown, ocularly absorbed, drunk (tobacco juice), ingested, snuffed, topically applied, and anally injected, to name but a few of the ways it has been used (Hughes 2003).

So where might we begin to look at this long-term set of developments? The plant was introduced into Europe in mid-to-late 1500s by explorers of the "new world". But tobacco was used for thousands of years by Amerindian peoples prior to contact with Europeans. It makes sense then, to "begin" our process there. As a way of helping structure this "broad" brush account of the development of tobacco, I've divided up the historical material into three phases: pre-modern, early-modern, and modern tobacco use. It should be noted, of course, that real world processes rarely can be so neatly delineated into "stages" or "phases" in this manner. The divide thus serves heuristic more than ontological purposes.

Pre-Modern Use

> Metsé inhaled deeply, and as he finished one cigarette an attending shaman handed him another lighted one. Metsé inhaled all the smoke, and soon began to evince considerable physical distress. After about ten minutes his right leg began to tremble. Later his left arm began to twitch. He swallowed smoke as well as inhaling it, and soon was groaning in pain… He took another cigarette and continued to inhale until he was near to collapse … Suddenly he "died", flinging his arms outward and straightening his legs stiffly … He remained in this state of collapse nearly fifteen minutes … (Dole 1964: 57-8).

The above extract describes the usage of tobacco by a tobacco shaman. While the account was collected in the twentieth century, the ritual described involves practices that date back to pre-Columbian times in the Americas. Pre-Columbian Amerindian tobacco use typically involved the consumption of strains and varieties of tobacco that were much stronger than those of latter day cigarettes. Tobacco was, more than any other psychoactive substance, used extensively in shamanistic ritual. There is a wealth of documented evidence to suggest that the tobacco used in the "old world" was fully capable of inducing hallucinations, including many early (bewildered) colonial accounts of "*godlesse*" natives using the substance to fall into "death-like" trances. A key component of much Amerindian cosmology holds that only through overcoming "death" that one is able to "treat" it. Understandings and practices surrounding tobacco and its use varied widely, but a common theme was that tobacco was a sacred plant that hinged together the physical and spiritual world. Tobacco-induced intoxication was thus a means of "communing with the spirits"; and the plant plus ascending tobacco smoke had enormous symbolic potency. Shamanistic "deaths" could last up to fifteen minutes, and would sometimes lead to actual deaths from acute nicotine intoxication. The evidence from ethnopharmacological research suggests that the chief pharmacological agent in the tobacco consumed was nicotine, though other psychoactive alkaloids present in rustic strains of tobacco might also have had a role to play, particularly when combined with high doses of nicotine. In fact, anthropological accounts suggest that the tobacco plant was used more than any other in Amerindian shamanistic ritual, principally because its effects were predictable and relatively short-lived. Recreational use of tobacco among "old world" Amerindians - and it is problematic to make any simple blanket generalisations - was typically less dramatic, but still involved relatively potent strains that would in many cases be smoked sitting down, often inducing intoxication and unconsciousness (see, for a fuller account of Native American tobacco use, Wilbert 1987).

Early-Modern Use

Tobacco was first brought to the Court and gardens of the European aristocracy and secular upper classes in sixteenth century by returning travellers from the Americas. It was quickly hailed to be a "panacea": a cure-all that was prescribed as a remedy for an impressive array of ailments - everything from toothache to cancer. Part of the reason for tobacco's success was that it fitted well with the system of medical cosmology that was prevalent in early-modern Europe (Goodman 1993). Briefly, the prevailing understandings by leading physicians held that the body was made up of different "humours" such as blood, bile, and phlegm. These humours had different properties - they could be hot or cold, dry or moist. If someone was phlegmatic, they had a surplus of mucous (typically, a cold, moist humour) - and were typically dispassionate and emotionally "cold". Conversely, if someone was "sanguine", they were likely "hot blooded" - evident, for example, in their ruddy complexion and an optimistic disposition. It is noteworthy that there was no simple divide between ailments of the mind and body, all were seen to be part of the same malaise. The goal of humoural medicine, then, was to restore bodily equilibrium. Too much hot bloodedness could be corrected by bloodletting, particularly through the application of leeches. Similarly, an excess of cold, moist humours (we still talk about having a "cold" today) could be corrected by ingesting a substance that was "hot and dry". Tobacco was understood as one such substance that was particularly well suited to "dissipating evil humours" on account of it being "hot and dry in the second order". The evidence for tobacco's efficacy was confirmed by the spitting, coughing, and expectorating that accompanied its use. The medicinal use of tobacco caught on rapidly, but soon gave way to recreational use. Its cultivation soon became more widespread. By the early 1600s there were more than 2000 tobacco plantations in south of England alone (Harrison 1986: 556).

It was only the weakest and most palatable strains of Amerindian tobacco that were adopted by European users. Yet even these were extremely potent by today's standards: there are many accounts of deaths from excessive smoking resulting from acute nicotine poisoning. Use of tobacco at this time contrasted starkly to present-day practices. Early smokers were referred to as tobacco "drinkers" or "dry drunks", not simply because no other model than alcohol existed with which to make sense of the practice, but because the forms of tobacco in use were far more capable of inducing intoxication. In his famous *Counterblaste to Tobacco* (1604)*,* King James I remarked that both alcohol and tobacco «stab and wound the brain with drunkenness». Some commentators at the time were concerned that smoking, like alcohol consumption, would make «men unfit for labour».

As recreational use expanded, smoking rapidly became widespread; even a mark of sociability (many tobacconists shops had the motto «Let brotherly love continue») (Apperson 1914: 44). Smokers would meet in alehouses and coffee shops, sharing pipes and discussing the affairs of the day. The practice was typically messy: not just from filling and emptying pipes, but also in a physical sense - smoking would regularly provoke coughing, spitting, expectorating, and sometimes vomiting. With its recreationalisation, the practice also filtered down the social hierarchy; so much so that by, the mid-to-late seventieth century, smoking had become "common" - it was increasingly seen as plebeian (Hughes 2003). Accordingly, from being a once fashionable practice of the higher echelons of European society, it soon came to be regarded as the mark of a dissolute lifestyle, and came to be increasingly associated with vice. There is some anecdotal evidence that by the late seventeenth century, prostitutes used the pipe as a symbol to advertise their services (Greaves 1996: 18).

In tandem with such developments, there emerged an increasing social pressure on elite smokers to distance and distinguish their smoking practices from those of their perceived social inferiors: *a quest for distinction*, to use Elias's terminology. In relation to this development, the period witnessed the emergence of increasingly complex rituals surrounding filling pipes, lighting them, exhaling smoke, etc. Elite smoking could be distinguished from common smoking through the customs and practices that surrounded exhaling smoke, plus a kind of connoisseurship surrounding species and varies of tobacco. There also emerged a proliferation of highly prized smoking paraphernalia such as expensive pipes and jewel encrusted tobacco boxes. Historians of the period refer to "smoking dandies": highly self-conscious smokers who were subsequently somewhat ridiculed on account of their effeminate dress and slavish devotion to the latest fashions. If some accounts are to be believed, it was

possible, at a price, to attend a "smoking school" where a professor in the "art" of smoking could teach you the most refined and elaborate way to consume tobacco (Apperson 1914)! Gradually, however, among elite groups came to copy the French Court and adopted the practice of snuffing.

Snuffing involved the consumption of many concoctions, but generally referred to the process of snorting through the nose a quantity of powdered tobacco. Snuffing became increasingly popular in Europe of the eighteenth century. Particularly in French Aristocratic Circles, but also in Germany and England, and later in Japan and China. Snuffing is interesting because it constitutes an early example of smokeless tobacco (Brooks 1937: 52).

There are lots of historical accounts of the nuanced and ostentatious ways of "taking the pinch": how one should show the wrist, how to offer the box of snuff to others first, and other highly complex and sophisticated codes of etiquette surrounding the practice, which would be emulated by members of the "aspiring classes". Even snuff boxes were often elaborate and ornate, made of precious metals and stones. Marie Antoinette famously would proffer snuff boxes as expensive gifts (Goodman 1993: 74). And yet, paradoxically, while snuffing was seen to be the height of refinement, it was still incredibly messy and unsanitary by our modern standards. A good pinch of snuff would produce instant, almost violent sneezing, showering one's clothes with snot. In the case of heavy snuffers, a patina of mucous would build up over time. Again, this was still considered to be healthy. It was a way of clearing out evil humours from the head.

Snuffing was thus dangerous, not so much in the sense that we might typically understand the "dangers" of tobacco use today: it was *socially* dangerous. It required a skilled controlled de-controlling of the self: a rapid "escape" from and "return" to normality.

The dangers are aptly illustrated in this quote, which refers to "snuff pellets":

> Snuff pellets left inside the nostrils would «draw out moisture from the nasal cavities». However, «…one only recommends it to those who, in using it, can avoid the indecency that appears when the pellets, being discharged from the nostrils and the drop of snot that is always suspended, soils the chin and nauseates the person with whom one is speaking» (Antonil 1965 [1711]: 321).

Ultimately, perhaps precisely because of these social dangers, snuff pellets did not become widely used. But they serve to illustrate the more general change of direction that is exemplified by snuff: 1) a shift towards forms of tobacco that produce short-lived, transient effects; and 2) the growing significance of fashion and changing behavioural standards – changing "sensitivities" in shaping the practices surrounding how tobacco was used.

Modern Smoking

The shift towards snuffing then, I have suggested, related to a fundamental tension: *between what tobacco does to and for us and what it does to and for others*. Perhaps the most notable thing about cigarettes - which became increasingly popular throughout the nineteenth century - was that compared to earlier modes of smoking, particularly pipe smoking, they were extremely "safe".

They were "safe" in the sense that, after a relatively short period of habituation, they generally didn't produce intoxication. Different curing processes, plus the increasing use of tobacco strains with lower yields of nicotine made cigarettes much "milder" than antecedent forms of tobacco. But that term "mildness" must be surrounded with "scare quotes". Mildness became a watchword which advertising campaigns could load with all kinds of claims: that certain cigarettes were less "irritating"; that they were milder tasting; that they were cleaner and more

gentle; and also, in some cases, more genteel. Associations were drawn with "mild manners". Such associations were also highly gendered: the notion of mildness was frequently mobilised to invoke the fairer sex - associations with delicacy, lightness.

Cigarettes themselves gradually changed, continuing in the direction of the longer-term trajectory. For example, filter tips became almost ubiquitous. But these were developed not to screen out harmful chemicals, but originally to prevent the unsightly habit of spitting out loose tobacco, and to meet demands for a "less irritating" smoke (Goodman 1993: 110–111). Cigarette holders too, put more distance between tobacco and the user. Again, we can see the significance of changing behavioural standards in driving changes in the form tobacco consumption takes.

Indeed, to a degree, with cigarettes the "form" of tobacco had caught up with the demands for social refinement. Cigarettes provided a much safer balance between what tobacco does to and for the user, and what it does to and for others. Compared to what came before it, the cigarette was indeed much "milder" in the sense of involving less immediately observable physical effects. While snuff was considered refined, it typically involved the expulsion of mucous, the placing of fingers into orifices, and a repeated transient loss of control through sneezing. The cigarette, by contrast, had little effect. It could even be smoked whilst working. It is paradoxical in this respect that cigarettes were in part successful precisely because their effects were much less pronounced than earlier forms of tobacco: to put it provocatively, they became successful because they "didn't do as much" to the user in an immediate and visible sense. The paradox is all the more significant with the benefit of present-day knowledge about the long-term invisible effects of tobacco consumption.

The key differences extended also to how tobacco was being used and understood by smokers. From at one stage being understood as medical agent on "the body", tobacco increasingly came to be seen as a "medicine of the mind" - a cure for the "ills" of civilisation. With the cigarette in particular, we came to understand tobacco as a psychological tool, one with "biphasic" effects: it is both a stimulant that can "pick one up", and also a sedative that can "calm one down". Tobacco, in this way, came to be understood as a substance that could be used as an *instrument of self control*: returning one to normal from different dysphoric states.

That theme of control was also increasingly extended to weight control. Slogans such as «reach for a lucky instead of a sweet» (Lucky Strike) helped reinforce the sense that smoking could make you thinner – a message that was typically aimed at female smokers. The promotion of "lighter" cigarettes at once made great play of associations with "mildness" and bodily "lightness" (weight loss). Particularly after the 1960s, lightness came to signal *lower tar* cigarettes. That trend continued with the advent of super low tar, ultra low tar, and brand variants which seemingly reduced to fractional milligrams the amount of tar and nicotine the cigarettes yielded (albeit that, as subsequent research has shown, claims that these new cigarettes were safer were spurious at best) (Hughes 2003).

For present purposes, it is important to note an important shift: terms such as "mildness" and "lightness" start out at first as markers of *social* safety. They signal that a particular form of tobacco is less likely to cause embarrassment, and is more in tune with social mores. But later these terms come to be understood to be indicative of *physical* safety: of healthier, less dangerous ways to consume tobacco. This shift – from social to physical safety - is crucial for understanding subsequent developments, including the ascendancy of the electronic cigarette and its link to broader processes of civilisation.

Early-Modern to Modern Use: The Key Transitions

It is once again important to note that there are huge variations in the processes documented thus far For example, Sweden has a long history of snuff use. Similarly, Post-Columbian North America has long association with chewing tobacco. Other forms of smokeless tobacco have at certain times and in certain places been highly significant and more than "blips" in the more general trend of smoking (Goodman 1993). That said, it is possible to discern an overall direction of change, at least at a high level of generality, which involves a series of elements.

Firstly, an overall move towards progressively less potent forms of tobacco: towards modes of consumption and species and varieties that are less likely to produce intoxication. Secondly, in tandem with this first development, we can observe a process of "diminishing degrees of pharmacological involvement". By this I refer to a kind of continuum of drugs with heavy opiates such as diacetylmorphine (heroin) on one end, and tea and coffee on the other. Tobacco, to put it crudely, has moved increasingly towards the "tea and coffee" end of this continuum in terms of its "potency", for want of a better word, for I'm referring not simply to plant yields, but also to practices surrounding use and changes in the method of its consumption. Particularly when one contrasts modern use with that of Amerindian shamans, it is possible to see how tobacco has been effectively "tamed". By this I mean that there has been a longer-term shift towards kinds of tobacco and modes of its consumption that generate less pronounced effects. Interestingly, as the "pharmacological impact" diminishes, so, increasingly have the effects of tobacco become increasingly ambiguous and open to interpretation. So in tandem with these processes we might witness a concomitant increase in "degrees of social and psychological involvement": what a tobacco user "makes" of their experience of the drug becomes progressively more significant.

The key point for present purposes is that changes in tobacco – the plant, the mode of its consumption, the practices surrounding its use, and so forth – follow changes in the social uses in tobacco. Central to these changes is the motif of *control*. To summarise it more pithily, we can over the longer term witness *a shift from the use of tobacco to lose control and escape normality and towards the use of tobacco to maintain control and return to normality.*

It is changes in the social uses of tobacco, and in relation to this, changing social and behavioural standards that have been the principal driving force for changes in tobacco use. A key factor here then is not so much growing health concerns, but growing social pressures. That is to say, concerns for *social* safety, the avoidance of social stigma, have primacy in driving developments in tobacco use. These concerns subsequently become replaced by, and conflated with concerns for *physical* safety. It is these changes that have had a major role in the shift towards cleaner, more sanitised, more "civilised" forms of tobacco.

Of course, the problem with the cigarette - *the* defining problem - was and still is that, however "refined" compared to that which came before it, it nonetheless involved smoke. That is to say, it still involved pungent fumes that invaded the air of others. Not only that, particularly over the last three decades, it has become increasingly widely accepted that this smoke is harmful not just to the person who consumes it intentionally. With this, the politics of smoking have changed dramatically. Previously, opposition to smoking had always foundered on a ethic of personal freedom: «it's my body and I can do what I want with it». But with the advent of research on the effects of second hand smoke or passive smoking, this changed: smoking became viewed as an agent of communicable disease.

Smokeless Smoking

It is against this backdrop - the shifting politics of smoking, and a sea change in public opinions towards secondary smoke - that we can understand the rise of the smokeless cigarette, a forerunner of the electronic cigarette.

One of the first was introduced was RJ Reynolds Premier, 1987. RJR, now Reynolds American, produces brands such as Camel and Winston. The Premier was lit like a normal cigarette, but it produced almost no smoke. It comprised a cylinder of tobacco wrapped around a carbon rod that was ignited and burned down. At the filter end of the cigarette were beads of tobacco extract, nicotine, and flavourings. The hot air was then drawn over these beads via inhalation. The marketing tagline for the new product was «Premier - the cleaner smoke».

Smokers hated it! They said it tasted of carbon. Despite marketing attempts to obfuscate the issue, it was not in any clear way less harmful, that is to say, physically safer, than normal smoking. It was slated at the time by tobacco control authorities for being just a piece of trickery: simply pretending to be safe. Nonetheless, my argument is that this was more than just trickery. It did indeed start to address social demands for a cigarette that was less invasive to others, which, again, must be understood against the backdrop of growing awareness of the dangers of passive smoking. It is highly significant that the marketing campaign for Premier centred on the notion that it was *cleaner*: it didn't sully the smoker - it produced less physical, moral, and aesthetic "taint".

RJR Later released a similar device called Eclipse. Here the claims were that it was 90% safer than a normal cigarette. But it still contained numerous carcinogens, notably tobacco-specific nitrosamines, and other compounds such Carbon Monoxide. The American Cancer Society soon moved to have it outlawed, saying it created a false sense of security among smokers. This move should be understood as an extension of a more general argument developing at that time that "lighter", "low tar" variants of leading brand cigarettes had the same effect as their full tar counterparts. Rather than leading to a reduction in their consumption of harmful carcinogens by their uses, smokers would find ways to self-titrate - for example, through blocking the holes of a "Silk Cut" cigarette filter and/or taking harder "drags" from their "lites" - to obtain a higher nicotine (and with it tar) yield (Hughes 2003).

Just to be clear: this is not to dispute that the tobacco industry were often devious in the marketing of these ostensibly safer tobacco products. But rather, it is to highlight that they were also extremely adept at tapping into the longer-term set of demands for social safety and then confounding these with demands for physical safety, albeit without a scientific basis for doing so. Ultimately, neither of these devices - the Premier or the Eclipse - were successful, but they were nonetheless important antecedents of a new product that has emerged less than a decade ago: the electronic cigarette.

E-Cigarettes

Electronic cigarettes are now known in policy circles as "ENDs": electronic nicotine delivery systems. For the benefit of those who have never seen or used an electronic cigarette, here's a brief description. The device contains a battery, an atomiser, a heating element and a replaceable cartridge. They contain no "tobacco" as such, just its principal derivative, nicotine suspended in a propylene glycol liquid solution (sometimes in glycerine and water). When heated, that turns into a fine smoke-like mist or "vapour" (users are called "vapers" on this basis). Vaping looks like smoking, but involves not combustion, just atomization: steam, not smoke. It is currently possible to buy many different flavours of the nicotine solution – cherry, coffee, toffee, vanilla, bubble gum even tobacco! Some have LEDs at one end, again glowing in a way that simulates smoking. So for the first time, smokers truly have a means of "*smoking without smoke*".

According to some estimates, there are something like 1.3 million e-cigarette users in the UK alone (ASH 2014). That is still a fraction of the 10 million people who smoke. But the number has grown rapidly over the last few years. (Two years ago it was only 500,000) (ASH 2014). One of the first ever e-cigarettes was developed in the US as far back as 1963, but it emerged at a time when conventional cigarette use was still on the rise. Quite some time later, the "Ruyan" was brought to market (in 2005) by a Chinese electronics start up. Ruyan received a

patent in 2007. Since then, rapid changes have been underway. E-cigarettes have increasingly come to be publicly noticed and debated. Over the last year in particular, there has been an explosion of interest in the popular and scientific literature.

Key developments in the rise of e-cigarettes include a move away from the straightforward mimicking of conventional cigarettes. There are now a bewildering array of futuristic looking devices, some of which bear no resemblance to ordinary cigarettes. Many authors now draw a distinction between first generation devices which are "cig-a-likes" (a portmanteau of cigarette lookalikes) and second generation devices which tend to look very little like conventional cigarettes and have refillable nicotine solution reservoirs. Second generation devices generally deliver more nicotine and are more customisable by users. They mark a further stage in the much longer-term individualisation of smoking (see Hughes 2003). Another significant development is the increasing involvement of large tobacco corporations. Reynolds American has recently brought to mark the Vuse. The Vuse marketing pitch includes an explanation of why it is the «World's most advanced e-cigarette»: «The VaporDelivery processor working with SmartMemory monitors and adjusts the power and heat up to 2,000 times a second … ensuring consistently satisfying puffs» (vusevapor.com). Reynolds is clearly beginning to draw upon its expertise in having a long history of making cigarettes to "ensure satisfaction" for the latter day "tobacco" consumer. Similarly Altria Group (maker of Marlboro cigarettes) has introduced Mark Ten a very modern, clean sleek looking product with space-age packaging to match. Such products are seemingly a world away from iconic adverts featuring the Marlboro Man – the rugged cowboy looking out across the vast expanse of Western wilderness.

We might then be tempted to see the rise of smokeless smoking as a very recent development, but in fact, smokeless tobacco devices have already been with us for quite some time. We tend not to think of them as such, but nicotine replacement therapies (NRTs) have been around since the 1980s. Something like 1-in-3 smokers have tried them, and many continue to use them as alternatives to cigarettes rather than as cessation devices.

Nicotine as a Therapy or a Drug?

Nicotine replacement therapies include patches, gum, sprays, lozengers, and the "inhalator" – a device that looks like a plastic cigarette, a tube through which nicotine and air can be "sucked".

It is significant that, in the mind of policy makers, for a long-time there has been widespread acceptance of the clear difference between these therapies that help us *stop* smoking, and tobacco products that help us *keep* smoking. But the rise of e-cigarettes has now blurred this distinction beyond all meaningful recognition. The distinction relates to a long-running debate in tobacco control circles: between those who favour abstention and those who favour safer sources of nicotine. In recent years, ASH, the Royal College of Physicians, and other key authorities have increasingly come to accept a harm reduction strategy, but this remains highly contentious.

So what we have witnessed, effectively, is a convergence of devices to stop smoking with new modes of consuming tobacco. To return to my opening question: how can we explain this? How did this come to be? Here we come to some key sociological theories. The most significant of which is "medicalisation".

Medicalisation

Tobacco, if anything, is an archetypical case of medicalisation. The term refers to the extension of medical jurisdiction over increasingly broader areas of people's lives. This involves a shift in how behaviours such as smoking are understood, classified, and "treated" (in both senses) - a shift from "badness" to "sickness" as sociologists Conrad and Schneider (1980) put it. With this shift, we have seen the growing understanding of tobacco as an

addictive disease in itself, and with it, a shift in the social opposition to tobacco: from being a sign of immorality or a dissolute lifestyle, towards it being understood as a public health risk.

But a simple reading of medicalisation does not fit so well with the historical evidence. The medical profession - and it is problematic to talk about the profession as though it constituted a homogeneous group - has, for the longest time, had a complex relationship with tobacco. For instance, there are many well-documented cases of individual GPs privately endorsing smoking to calm the nerves, even some time after the epidemiological studies by Doll and Hill linking smoking to lung cancer (1950). Even a very recent study by Alison Pilnick and Tim Coleman (2010) found the profession at best circumspect in accepting the delegation of responsibility for smoking. The study examined clinical encounters between doctors and patients who seek advice on smoking cessation, and found that GPs shied away from pressure to practice preventative medicine in the form of prescribing NRTs, and from framing the problem as squarely one for medical jurisdiction. In addition, there is evidence to suggest that some pharmaceutical companies have been hesitant to become involved in NRTs because of the potential damage an association with tobacco might do their public image.

However, if we adopt a broader view of medicalisation: as, to put it simply, about the extension of medical "frames of reference", the evidence and case is rather more compelling. Particularly since Michael Russell's work in the 1970s, we have come to think of smoking as *essentially a means of nicotine self-administration*. Russell's work established the idea that smokers become addicted to nicotine, but get killed by the tar in cigarettes. To this day, this core idea underpins the search for safer sources of nicotine, and eventually, NRTs.

So my argument is that medical understandings of tobacco haven't just changed how we think about tobacco, they've helped drive a change in what "tobacco" actually is: users increasingly no longer consume tobacco, they consume instead its principal derivative "nicotine". This involves a kind of self-fulfilling prophecy: we come to think of tobacco use as simply nicotine self-administration and this, over the longer term, has helped tobacco use *become* essentially a form of nicotine self-administration. Tobacco has become pharmacologically and socially "sanitised", cleansed of its "dirty" compounds - reduced to just its principal psychoactive component nicotine, suspended in liquid. And even lay understandings of tobacco use have followed suit: smokers and vapers understand themselves as "nicotine users", and tobacco use as a practice is widely recognised as "nicotine addiction". It hardly needs to be stated that we no longer think of tobacco use as a "private habit", or a "collective ritual": we understand it in medical terms and frames of reference. Policies, practices and patterns of use follow directly from that set of understandings.

Paradoxically, both e-cigarettes and NRTs, when viewed in this fundamental way, *are exactly the same thing*s: nicotine administration systems. So the emergence and increasing dominance of medical understandings of tobacco use has left a gaping, quite beautiful, but also quite contradictory, tautology. This is nowhere better illustrated than in the case of NRTs: here we have a therapy that is based on the idea that *we can use nicotine to "treat" tobacco*. But with the rise of e-cigarettes, "tobacco" has effectively *become* just "nicotine". So, again, *what now is the difference between the devices we use to keep smoking and the devices we use to stop smoking*? There's a distinction in policy debates between "medicinal nicotine" and smokeless tobacco products: one is a "therapy", the other is a "drug". But this distinction is, in the final analysis, pure artifice. When one consults users, the distinction completely collapses.

Physical or Social Safety?

Here's an extract from a contributor's post to a UK forum for "vapers":

> Got my E-cig, a pleasantly sophistomacated looking gadget… it gives excellent vaper… To be honest, I think the government should push em: The product is sold to you with no suggestion of it being a smoking (nicotine) cessation

device. I'm enjoying switching my addiction delivery to the E-cig, and not gum or patches. And I get to blow vaper in the pub. Lovely :) - ProppyGander

For ProppyGander this is simply another way of "smoking". She has internalised the medicalised idea that this is a "nicotine delivery system", indeed this clearly informs how she thinks about what it is that she is doing: but she was already using gum/patches in this way too. In this sense, e-Cigarettes are a have your cake and eat it device from a user's perspective. Essentially, they provide both "physical" and "social" safety: th*ey won't kill me, and I can carry on smoking: I can even smoke in the pub*.

To put it provocatively, the distinction between nicotine the therapy and nicotine the drug is one that is drawn in the air, so to speak. Unlike methadone and diacetylmorphine (the therapy to treat the drug – heroin), NRTs and e-cigarette's deliver exactly the same alkaloid: the same substance. There are two key points for the purposes of this discussion: 1. Viewed in the longer-term, the rise of NRTs and e-Cigarettes are actually two sides of the same coin, that is to say, two facets of the same development. The development, over the longer-term has been the increasing shift towards lower dose, cleaner, and safer forms of tobacco. To put it bluntly, both NRTs mark a further stage in this longer-term sanitisation of smoking: the shift towards more and more controlled and individualised forms and usage of "tobacco", and the increasing use of nicotine as a means of self-control. 2. There's evidence - beyond this quote here - of smokers long employing NRTs as a means of continuing their use of tobacco (here as nicotine self-administration) not as a means of stopping (despite often good intentions from them and others). Also, conversely, recent studies suggest something like 40% of quit attempts are now made with e-cigarettes (ASH 2014).

In NRTs pharmaceutical companies, albeit unwittingly, provided what tobacco companies could not: physically and socially safer sources of nicotine, and with it, a means to *keep* smoking. They also provided an important psychological and behavioural bridge between combustible tobacco and the e-cigarette. Of course, in tobacco control circles, NRTs were never intended for this purpose. Quite often, particularly in the context of stop smoking services, great lengths are gone to in order to ensure that end users view NRTs as therapies - with clear quit dates in mind; with the aim of gradually reducing the dose of (and, it is hoped, the user's dependence upon) nicotine. In a significant proportion of cases, this approach has the desired effect. In many others, it does not. The key point is that it is not the delivery mechanism that determines whether any particular device or substance constitutes a therapy or a drug, but, ultimately, *how these are understood and used by users*: the *social* uses of tobacco, and the *social* context of that use.

Policy makers draw neat categorical distinctions between NRTs (which are said to be "good" because they are understood to be a stop smoking device) and e-cigarettes (which are said to be "bad", because they are understood to be keep smoking devices - either by keeping a user using nicotine or, so the argument goes, through becoming a "gateway" or "bridge" to combustible tobacco), but these will not prevent users making their own decisions as to whether to use one or the other as a drug or a therapy. Some users will carry on using NRTs as a safer way to "smoke"; others will continue to use e-cigarettes in their attempts to quit, and vice versa. A further, step in the medicalisation of tobacco would involve e-cigarettes becoming appropriated as "therapies" (recent policy directives, such as the Tobacco Products Directive passed by the European Parliament in March 2014, suggest such a move is already underway). This would, of course, mean the development of increasingly tight controls over how e-cigarettes are sold, whom they are sold to, how they are packaged, how they are marketed, and how they are positioned to "consumers", or perhaps increasingly, "patients". It would mean that nicotine flavours would be outlawed, attractive packaging and user customisation too would need to be removed via legislation. If we continue with the possibility, in line with the longer-term shift towards sanitisation of tobacco use, e-cigarettes would likely come to resemble "inhalators", albeit delivering "vapour" - in highly regulated yields. Most importantly of all, it would be made clear to users that these devices were intended as cessation aids, and not as recreational products. But what would this achieve? Would the unintended consequences outweigh those, albeit highly laudable, ones

that were intended?

To consider a parallel: ensuring codeine-based pain killers are available prescription only, not packaged attractively, and with clear dosing guidelines (together with all the usual warnings) does not stop them being used recreationally. Indeed, the misuse of prescription drugs in the US and, to a somewhat lesser extent, the UK, has become an increasingly large-scale problem in recent years. More importantly, if e-cigarettes are, so to speak, removed from the recreational space of tobacco use, might this in fact lead many users *back to* combustible sources? From the little that we know about the long-term effects of e-cigarettes, there is few who would question that they are much, much safer than their combustible counterparts: if e-cigarettes are dangerous in the longer-term, it is likely that NRTs will be too. E-cigarettes have the advantage, from a user's perspective, of mimicking some of the ritualistic aspects of smoking - the so-called hand-to-mouth pattern, and, of course, emulate the symbolism of smoking through vapour. They currently do not have the stigma of a therapy, and it is precisely because they are not sanitised, not associated with illness and recovery, and are perhaps even glamorous, that for some users, they are a far more appealing alternative to combustible tobacco than NRTs. In other words, some of the arguments about the glamorisation of e-cigarettes can be turned on their heads, at least in this key respect.

There is an even more radical possibility here, one that is perhaps unsayable in policy circles. But if it is the case that e-cigarettes are, on the whole, not that much more harmful than, say, drinking coffee, then might it be appropriate to accept that certain social groups should be permitted to "vape" without them having the intention of ever stopping? On what grounds would we reject recreational nicotine use if it no longer causes serious harm to the user? Moral grounds? Aesthetic grounds? The long-term history of the use of intoxicants would suggest that human beings are essentially a drug-using species. Might it then be more realistic to accept that there will always be a demand for the recreational consumption of tobacco (albeit as nicotine solution)?

Thus, to summarise I have argued that whether e-cigarettes are best conceived of as a cessation aid or a new means of using tobacco is not a matter that cannot be settled through policy classification, pharmacological distinctions, or through recourse to what happens at the level of brain chemistry, but through looking at the social uses and social contexts of that use. So once again, we need to understand the social dynamics of use, as well as the psychological/physiological/pharmacological ones. In particular, we need to consider the importance, once more, of changing social standards of behaviour.

The "Civilising" of Smoking

Elias, perhaps more than any other scholar, looked centrally at such changing behavioural standards in great depth. His most principal work: *On the Process of Civilisation* is a complex, tome that is impossible to summarise in a few paragraphs in such a way as to do it any kind of justice. That said, his concept of «civilising processes» is indispensable to my present discussion. Elias traced long term changes in social standards of behaviour with a focus on the transition from the middle ages to modernity. He was centrally concerned with the tandem ascendancy of *modern societies* and the *modern self*. To oversimplify: his term, the «civilising process», refers to how changes in our psychological makeup are linked to changes in our social makeup.

Elias documents in meticulous detail a growing social pressure towards restraining and curbing our spontaneous impulses, what he calls the *social restraint towards self-restraint*. He argues that these social pressures follow from the growing monopolisation of violence and taxation by the state, and an increasing social imperative for people to attune themselves to ever more complex social networks. Civilising processes can be seen, for example, in long-term changes in our table manners. We come to develop all kinds of rules about the use of cutlery, about how we behave at the table, about the suppression of bodily functions, and so forth. These follow from the growing social pressure to curb spontaneous impulses and to display *refinement*: *distinction* from our supposed social inferiors, and

how the latter displays become a growing source of *social capital*: how, within growing social circles, being able to handle yourself in company comes increasingly to matter more than how one handles oneself in, say, physical combat.

In the same way we might document a long-term "civilising" of tobacco use that is intimately bound up with these more general social processes. It can be seen, for example, in the shift away from the use of tobacco to lose control and escape normality (think, again, of the tobacco shaman falling into a death like trance), and the move towards the use of tobacco as an instrument of self-control that returns the user to "normality" (e.g. smoking to return one to "normal" by stimulation or relaxation). I have shown throughout this paper the significance of changing behavioural standards in driving these changes. In this process, I have argued, social dangers are as historically important as physical dangers. I have accordingly documented a long-term sanitisation of tobacco whereby tobacco has been "cleansed" of its smoke, and cleansed of disease.

For the moment at least, with e-cigarettes users can smoke in public without invading the air of others. There is no risk of fire, no risk of offence. The e-cigarette is surely the most "civilised" form of smoking thus far. E-cigarettes are non-invasive, (largely) non-offensive – a much "healthier", clinical, sanitised form of smoking. They are both physically and socially "safer" than any form of tobacco that has preceded them. They are "clean" in both an aesthetic and pharmacological sense. At the moment, users can "vape" in most public places (though this is changing rapidly, some countries such as Singapore and the UAE have already introduced a ban: e-cigarettes, it would seem, are guilty by association). Perhaps most interestingly, in the absence of any consensus regarding the physical dangers of smoking, debates have returned to the potential social dangers: might e-cigarettes serve as a "gateway drug", might they "renormalise" smoking, and more generally, might they be offensive to some "non-vapers". Seemingly without any clear evidential basis, the "gateway" hypothesis – that e-cigarettes are a gateway *to,* and not *from (*despite much evidence to the contrary), combustible tobacco – has come to hold considerable sway over the policy community. A timely case in point is the step changes introduced by the recent Tobacco Products Directive legislation mentioned earlier in this piece. The directive has recently been hailed as marking a great day for tobacco harm reduction. But viewed in the longer-term, viewed through the lens of the "civilising" of tobacco, this point is moot.

The directive effective continues the longer-term trend I have discussed throughout this piece – both the increasing sanitisation and regulation of smoking and the social pressure for the discursive reduction of tobacco to nicotine. Again, to labour the point somewhat, the policy is a response to *social pressures, not medical discovery –* indeed, the scientific case for regulating e-cigarettes is weak to say the least. Somewhat paradoxically, in responding to these social pressures, the policy might unintentionally play into the hands of large tobacco corporations who have seen their sales of combustible tobacco drop as much as 10% in tandem with the rise of e-cigarettes. As e-cigarettes become tightly regulated - soon requiring licensing, tightly controlled yield limits, etc. - who will be better placed than Big Tobacco to negotiate the rapidly increasing range and number of policy obstacles between the product and the marketplace? Who will have the resources, both financial and legal, to make the grade in policy terms? It is rather less likely that the many small producers and electronics start-ups that for the moment at least hold a significant share of the e-cigarette market will be able to compete. Big tobacco benefits not just by having an open road for potentially increasing their share of the e-cigarette market to the point of monopolisation, it also benefits through a potential resurgence in sales of combustible tobacco. If e-cigarettes are repositioned as a "stop smoking" device, smokers who wish to continue may well return to combustible tobacco, particularly if there is no longer a sufficient experiential equivalence between smoking and vaping as a consequence of tighter regulations. The threat posed to large pharmaceutical firms who produce NRTs also proportionally diminishes on two fronts – first as competition from e-cigarettes in the recreational space is reduced, and secondly because the somewhat perverse symbiosis between combustible tobacco and NRTs (the "drug" which underpins demand for "therapies" – which are treated as a different class of "thing") becomes restored.

This lens of civilising processes, then, is crucial to understanding the rise of e-cigarettes, and, more generally, to understanding the debates surrounding recent policy developments pertaining to these new devices.

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