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FULL TITLE: Reflections on the enduring value of critical scholarship

RUNNING TITLE: Critical scholarship

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Key words: Alcohol, sociology, critical analysis, genetic research, Robin Room

Introduction

Robin Room's unparalleled contribution to the alcohol field spans historical, sociological, epidemiological and policy research. Some of the other contributors to this special issue celebrating Robin's work will no doubt focus on and engage with his significant contributions in history, epidemiology and policy. My starting point in this article is Robin's critical sociological analysis of the concepts of 'alcoholism', 'addiction' and 'dependence'. Sociological research has played an important role in understanding alcohol use – think *inter* alia of the work of Selden Bacon, David Pittman, James Spradley, Joseph Gusfield, Norman Denzin and Mariana Valverde. It has illuminated the everyday practices and perspectives of alcohol consumers; drawn attention to the social, cultural, political and economic contexts of drinking; and scrutinised the assumptions and politics of alcohol research, policy and practice. When Suzanne Fraser, Helen Keane and I began writing a book on changing ideas about addiction, using methamphetamine, alcohol and obesity as case studies [1], we turned for inspiration to Robin's critical conceptual work. We did this because of the enduring value of this exemplary work and because Robin, more than any other sociologist of alcohol use, has been thoroughly enmeshed in the field and his work both reflects and tracks its major theoretical and empirical developments. In this article, I briefly summarise some of Robin's key writing on addiction before applying this critical approach to a key area of contemporary alcohol scholarship – neuroscientific and genetic research on alcohol addiction.

Room on 'alcoholism', 'addiction' and 'dependence'

In a series of scholarly publications, Room has pursued an ongoing critical engagement with concepts of 'alcoholism', 'addiction' and 'dependence', never being merely content to accept them as beyond scrutiny and debate. In a 1983 book chapter, he traced scientific debates occurring between the 1940s and 1970s over 'alcoholism's status and characteristics as a

disease' [2]. Proponents of the concept of 'alcoholism' understand it to be 'a Platonic entity rather than a human construction; it really exists'. According to Room [2, p. 55], the view that:

'alcoholism is a disease' ... includes within it the assertion that alcoholism should be regarded as an entity. In fact, both psychiatric and lay discussions which were couched in terms of alcoholism tended not to raise ... the issue of the entitativity of alcoholism; it was an assumption buried beneath the discussions of exactly how 'it' [alcoholism] was to be defined.

By comparison, sociologists of this period adopted a more critical 'nominalist stance to the disease concept – a view of the concept of alcoholism as a social creation of particular times and situations' [2, p. 49]. Here, we see the sociological insistence on acknowledging the importance of historical and sociocultural contexts in shaping scientific and clinical (as well as lay) ideas about alcohol use.

Following the widespread adoption of the concept of 'dependence' from the 1970s onwards, Room published another critical account of prevailing scientific ideas about alcohol use [3]. He suggested that there were three ways in which sociocultural contexts could be taken into account in understanding alcohol dependence. The first is 'simply to take dependence or addiction as a given ... and to consider psychosocial among other factors in its occurrence' [3, p. 133]. From this perspective, the prevalence of alcohol dependence is 'affected by sociocultural factors'. The second involves deconstructing the "given," the disease or condition or dependent variable, and to consider to what extent sociocultural factors can be part of the essence of what is to be explained' [3, p. 133]. The third way – what Room terms the 'constructivist' or 'historical social constructionist' approach – is to 'distance ourselves from the disease or condition or dependent variable, and so shift to the question of how such

conceptions as the disease concept of alcoholism or addiction [or dependence] arise'. From this perspective, to which Room subscribes, such concepts are 'sociocultural creation[s] that [tell] us as much about structures of thought in a given social order as about the nature or reality of individual experience' [3, p. 133]. Rather than accepting the 'reality' of dependence, this perspective understands the 'dependence concept itself' as a 'sociocultural construction, located in a particular time and place and sociocultural circumstances' [3, p. 134].

Taking up this constructionist stance, Room moves on to offer an alternative perspective on the defining feature of dependence in prevailing psychobiological accounts – 'loss of control'. On the basis of existing sociological [4], historical [5-6] and anthropological research [7-8], Room [3, p. 136] concludes that:

In the context of American and British societies, then, it can be argued that both the idea of addiction and existential experience of loss of control to which the idea refers are historical creations of a particular epoch, reflecting a particular organization of society.

In putting this argument, Room's position echoes those of MacAndrew and Edgerton [9] and Marshall [10, p. 1] who argued that: '[t]he cross-cultural study of alcohol presents a classic natural experiment: a single species ... a single drug substance ... and a great diversity of behavioural outcomes'.

In a 2003 article, 'The cultural framing of addiction' [11], Room again returns to these issues:

We are not concerned here with the truth value of addiction and cognate terms [such as dependence] or with their empirical applicability. Thus we are not concerned, for instance, with whether there really is a single entity called 'alcoholism' or whether

alcoholism is really a disease. Instead, the concern is with what is meant when we talk about addiction and with the ways in which this conceptualization of behavior and events may be culturally framed.

In this article, in addition to re-stating the argument that a central feature of the addiction concept — loss of control or impaired control — is culturally framed, he contributes two further critical observations. First, a malign and seductive agency is often attributed to alcohol and other drugs, the use of which leads to 'bad behaviour'. Second, evaluations of addicted or dependent persons as having neglected their responsibilities and obligations are heavily underpinned by culturally specific temporal norms. In both cases, then, he again draws attention to the influence of the wider sociocultural context in shaping scientific understandings of addiction.

Room's critical analyses, and those of the historians, sociologists and anthropologists he cites, were crucial conceptual interventions in a field dominated by the 'governing images' [12] of 'alcoholism', 'addiction' and 'dependence'. They served to question orthodox ideas about alcohol problems built on often unexamined assumptions about disease, psychobiology and individual self-control, and drew attention to the social, cultural and political dimensions of concepts of addiction.

Scrutinising scientific accounts of the biological brain and body

Room's accounts of alcoholism, addiction and dependence provide guidance and inspiration for a critical analysis of a key area of contemporary alcohol research – the development of new technologies in neuroscience and genetics. Given their increasing prominence and status, and the politics of research funding and policy, it is important to subject these developments to sustained critical scrutiny.

Whereas earlier work on alcoholism, addiction and dependence emphasised disease, individual will and psychobiology, contemporary neuroscientific and genetic research locates addiction in the biological brain and body. In a recently-published analysis of genetic research on alcohol [1], we critically examined four reviews published in *Addiction* [13-16]. Taken together, the reviews argue that alcohol problems have a significant genetic component and can be addressed by future biomedical interventions.

In our critical analysis, we found that genetic research on alcohol addiction makes a number of questionable assumptions. (Some aspects of neuroscientific and neurobiological research have also been criticised by those working within the same ontological and epistemological paradigm [e.g. 17-18]). First, as Room also showed in his work on ideas about 'alcoholism', it constitutes alcohol addiction as an anterior entity – a real 'thing' or 'it' – existing independently of and prior to the terms used to define it. An extremely diverse range of terms is used to identify and fix the object of study: 'addiction', 'alcohol-related problems', 'alcohol dependence', 'alcoholism', 'addictive disorders', 'addictive diseases', 'alcohol problems/dependence', 'alcohol abuse/dependence', 'alcohol use disorders', 'alcohol (ab)use', 'alcohol abuse or dependence' and even 'susceptibility for alcohol consumption and dependence'. It appears that the 'problem' of alcohol (regardless of the term used to denote it) does not require exact specification. Instead, this terminological promiscuity, through its very lack of precision, helps to constitute an ontologically anterior object – an elusive but broad biological reality that awaits discovery as new research technologies, methods and findings emerge.

The second questionable assumption evident in genetic research regards the scope of the alcohol 'problem'. The allegedly scientific designations used in this research – such as alcohol 'use', 'consumption', 'dependence', 'abuse', 'problems', 'alcoholism' and 'outcomes' – cover all forms of drinking regardless of quantity, frequency and consumption practices. Yet these terms are widely understood in alcohol research more generally as relating to, or describing, very different modes of drinking involving different contexts and motivations as well as levels and types of harm. This imprecision eclipses the multiple possible combinations of alcohol, bodies, subjects, contexts and practices, and the many problems of alcohol are gathered together under the umbrella term of alcohol addiction. This move has serious political implications as it both expands the category of addiction and allows greater numbers of drinkers and a greater range of drinking contexts and practices to be pathologised.

The third questionable assumption in genetic research on alcohol addiction relates to the simplistic treatment of 'environment' or 'context'. For example, culturally specific, complex and/or politically charged phenomena are treated as singular, settled and uncontroversial 'variables', 'factors' or 'influences' (e.g. variables such as 'conduct disorder', 'depression' and 'childhood adversity'; personality traits such as 'impulsivity, self-control, conduct problems and aggression'; and 'environmental pathogens' such as 'negative or inadequate parenting', 'bad parenting' and 'poor family relations'). This simplification is necessary in genetic research because alcohol addiction is frequently defined as a 'phenotype' – a fixed object consisting of behavioural characteristics or traits displayed by affected persons – with research aiming to link the phenotype with specific genes, 'environmental factors' or 'variables', or 'gene-environment interactions'. However, as sociological research has consistently shown, these terms refer not to objective, empirical phenomena but to objects

produced through complex historical and political processes involving the medicalisation of deviance [19] and the pathologisation accompanying the rise of the psy disciplines [20].

The fourth questionable assumption in recent genetic research on alcohol addiction concerns the treatment of evidence, particularly that relating to causation. The reviews fudge the issue by adopting contradictory language: genes, or the interaction between genes and environment, 'cause' alcohol addiction but they are also described as 'contributing factors'. Although the stated aim of the research reviews is to discover the 'genetic basis for addiction', they frequently focus on 'influences', 'susceptibility', 'vulnerability' and 'liability'. The discussions of evidence in the reviews also frequently canvass but then ignore important and numerous caveats and limitations. For example, Agrawal and Lynskey [13] discuss four 'caveats' to the estimates of addiction 'heritability' derived from 'simple' twin studies. These studies: (1) assume that the researched twins are exposed to and respond equally to their shared environments (irrespective of gender), (2) neglect uninherited genetic modifications, (3) assume random (rather than assortative) 'mating' between parents and (4) do not consider the interaction between gene and environment but treat them separately as 'direct effects' – as the authors themselves concede, 'In reality, this is rarely the case'. Following their outline of these caveats, Agrawal and Lynskey [13, p. 1072] ask readers to '[keep] these limitations in mind' when considering the 'incredible wealth of information in this area' and urge them to 'refer to the exciting empirical research papers' they cite in the following sections of the review. Their plea sounds suspiciously like an injunction to allow this sense of incredibility and excitement to overrule reservations about the strength of evidence.

In view of the loose treatment of evidence and causation, and bearing in mind the previous point regarding the minimisation of caveats and limitations, the fifth questionable assumption in the reviews of genetic research on alcohol addiction is the authors' confidence regarding the impressive quality of existing evidence and their relentless optimism about the power of science to deliver new knowledge that will reveal the 'reality' of alcohol addiction. Although the paucity of existing findings is often acknowledged, there remains a palpable sense of optimism:

The road to the implication of G [gene] x E [environment] studies in (clinical) practice is still long but, to quote Kaufman & Gelernter ..., 'we are not discouraged by the failure to consistently replicate gene-environmental interactions, rather extremely excited by the potential of new investigative techniques to study risk and resiliency across species'.[16]

In other words, results so far have been disappointing but the authors remain excited.

In summary, recent genetic research constitutes alcohol addiction as an anterior entity existing independently of the terms used to define it, encompasses virtually all alcohol use in its definition of the 'problem' of alcohol, simplifies 'environment' to allow its measurement and linkage to specific genes, downplays the caveats associated with genetic evidence and trusts science to eventually uncover the reality of alcohol addiction. On the basis of these assumptions, addiction is constituted as a universal phenomenon that exists independently of history, politics and culture. Yet, as sociological research, not least that of Room, makes abundantly clear, this can never be the case.

Conclusion

In this article, I have drawn inspiration and guidance from the sociological writings of Robin Room. His lucid and engaging critiques of alcoholism, addiction and dependence have enduring value in the contemporary era as new understandings of alcohol use emerge, such as those in neuroscience and genetics, which demand ongoing scrutiny. Room's work reminds us to remain vigilant to the ongoing tendency for research on alcohol addiction to pathologise its objects of concern, to continue to scrutinise the assumptions and values produced in new research, and to remain attentive to the role of history, politics and culture in shaping (and being shaped by) scientific accounts. Despite its best efforts, alcohol science can never escape the times and places in which it is produced.

Acknowledgments

Sections of this article draw on material more fully elaborated in [1] and are used here with permission from Palgrave Macmillan. The National Drug Research Institute at Curtin University is supported by funding from the Australian Government under the Substance Misuse Prevention and Service Improvement Grants Fund.

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