

## The images theory of addiction

Pekka Sulkunen

University of Helsinki, Social Research, Helsinki, Finland

### Abstract

In everyday language, addiction usually refers to a strong desire that drives people to continue habitual behaviour despite acknowledged harm and their own will to quit. Many theorists and practitioners have long rejected the concept because of its tendency to individualize problem behavior, to focus on treatment rather than prevention, and to limit harmful consequences unduly to a selected group of users. There is no commonly accepted etiology of, or evidence-based treatment for, the condition, and diagnostic definitions are based on syndromes only. This article argues that the objections are not valid if we understand addiction as a generic concept, defined in terms of characteristics shared by several specific types, of which some are called prototypes. Addictions involve neurological adaptations but are not caused by them. They always emerge from culturally regulated behaviours, they are processes rather than on-off conditions, and involve types and pathways that depend on the social conditions in which they evolve. Addicted and normal uses are closely related and governed by images that define the functions, norms, meanings and use-values of the behavior. These will be transformed as addictions develop. The Images Theory of Addiction opens the way to understanding cultural variations in the addictive process, as well as to identify particularly risky images of potentially addictive behaviors. The theory is illustrated with examples from recent comparative studies.

### The Problem

Addiction is an instance of what Steven Lukes (2005/1974) writing of power, called essentially contested concepts. These concepts have no clear-cut definitions, but they have policy implications, even political connotations, and we need them in everyday conversations as well as in academic work. The addiction concept has these traits. It usually refers to a strong desire that drives people to continue a habitual behavior despite its acknowledged harm and their own will to quit. The idea is often extended to practices that involve no psycho-pharmacological substance. Yet there is no conclusive evidence that these behaviors are driven by the same mechanism in the human body or mind, nor that a common cause leads to them. The term “addiction” is now more often associated with “new” addictions; dependencies on alcohol or other drugs are more commonly described in older terms that refer to the specific substance, such as “alcoholism” or “alcohol, opiate, amphetamine etc. dependence (syndrome)”. The newly adopted fifth version of the Diagnostic and Statistical Manual of the American Psychiatric Association (DSM-V) follows this pattern. It reserves the heading “Substance Use Disorders” for substance-based behaviors, but introduces the category “Substance-related and Addictive Disorders” to cover gambling. Eventually other behavioral disorders, including obesity, may follow (Room, Hellman, & Stenius, 2015; Volkow & O’Brien, 2007).

Objections to the use of the concept as a research tool or as a guide in professional practice are many. First, the condition it refers to is ambiguous. Diagnostic and screening instruments such as DSM-V and the Alcohol Use Disorder Identification Test (AUDIT) list a number of symptoms, such as discomfort at abstaining (withdrawal), relapses, and various harmful consequences from the behavior, but are not based on an etiological theory explaining the condition. Claiming a number of these symptoms gets the person classified as an addict, but this classification may result from different combinations of the items. Second, framing addiction as a disease has been shown to be a successful approach in moral, legal and treatment discourses, but it lacks evidence-based medical application (Davies, 1997; Fingarette, 1988). Research on brain chemistry has not changed anything in this respect (Campbell, 2007). Many treatment methods exist in parallel, grounded in different and contradictory theories that all work equally well—or badly, depending on other factors (Orford, 2004, p. 203–216). Medication may help, but on the other hand, a significant percentage of those who recover from tobacco use or problems with alcohol, drug and gambling do so on their own, without any treatment at all (Klingemann et al., 2001, p. 65–87). Third, the concept focuses on the person, but addictive behaviors—like any social practice—depend on social circumstances and the opportunities into which people are pushed and pulled. Fourth, it has been argued that addiction is a social construction that resulted from the way social control was medicalized at the end of the nineteenth century (Levine,

1978). The condition came to be seen as a “disease of the will” (Valverde, 1998), as medical discourse assimilated the concurrent ideological emphasis on autonomous, self-controlling individuals (Ferenzy, 2002; Lupton & Petersen, 1996). Finally, policy experts have spurned the concept because it defines the public good in a limited and selective way. Heavy use over time is a better predictor of substance-related health and social problems, and does not require diagnoses of dependency or addiction (Rehm et al., 2013a). Epidemiology has no need for “an explanation in terms of a mysterious force that cannot be fully modelled in animal or neurobiological research” (Rehm et al., 2013b). A related argument is that attempts to control the behavior of people labelled as addicts are often rooted in biases against specific groups, and have less to do with the harm caused by the behavior than with disparities between those people’s observed lifestyles and what is expected of them by those in power. To promote the public good, the focus should be on reduction of the total amount of harm, regardless of who causes the harm, or by what particular practices (Sulkinen & Warsell, 2012). The first two objections are conceptual and philosophical; the last three reflect the notorious gap between prevention, which usually sees the concept of addiction as useless or even harmful, and treatment, which cannot do away with it.

My argument here is that these objections are not sufficient to rebut the notion of addiction as a whole. Many people experience unrelenting problems in their efforts to quit habits that cause pain to them and to other persons they do not want to hurt. Patients want explanations for behaviors that they themselves do not understand, and they want help in their efforts to change. *Some* theory is necessary to instruct therapeutic practices and to evaluate them. If we dismiss the concept altogether, we lose the possibility of asking what the different types of addiction are, and what they have in common, in terms of not only behavior but also motivations, explanations, relapse cues, behavioral and psychological “phenotypes,” and typical consequences.

In this article I present, in outline, what I call the Images Theory of Addiction. This theory addresses the issue of types of addiction. Related to types is the question of transitions or pathways from “normal” to addicted behaviors, including environmental stimuli, such as supply of opportunities, as well as learning processes and other mechanisms of habituation. The Images Theory does not focus on individual differences, but on social factors related to pathways. Finally, it is important to understand the way boundaries are drawn between addicted and non-addicted behaviors, not only for diagnostic and therapeutic purposes but also for risk assessment and prevention.

## The Concept

Before getting into the specifics, a note is necessary on definitions of words and their relationship to the objects to which they refer. Addiction, like all essentially contested concepts, is a generic term for a range of related observable phenomena. The logical problem in understanding it is similar to that pointed out by Lukes in his analysis of

power: the phenomenon has many dimensions and no limits. Addiction, like power, cannot be defined unequivocally by listing necessary and sufficient conditions of its occurrence. Like many behavioral and psychological patterns, addictions can only be defined as “prototypes,” a term used by the Canadian philosopher Ian Hacking (1998, p. 21–38) in his analysis of multiple personality disorder (MPD). Individuals suffering from this condition have several distinct and usually contrasting personalities that are part of the hosts’ memory of themselves, but each individual case is different. No two persons experience the condition identically, since there are no two exactly identical individual lives. Still, there are commonalities, combinations of factors that are typical but neither necessary nor sufficient to define a person as having MPD. Hacking’s philosophical stance applies in fact to all generic concepts (he calls them “kinds”). We cannot observe “animals” or “birds,” as such, only individual representatives of different species of animals. When people are asked to define what a bird is, they are more likely to think of a robin or a hawk than an ostrich or a penguin, although all are birds. The “birdiness” of robins and hawks is more complete than that of ostriches and penguins. Robins and hawks are *prototypes* of different kinds of birds, because they have more features in common with other birds than do ostriches or penguins.

With this approach to generic concepts, the first two objections listed above are not fatal. We do not need a specific etiological theory of mechanisms or causes to recognize addictions. There is nothing wrong with the symptomatic approach of the screening tests or diagnostic manuals. No single, universal (medical) treatment method needs to exist in order to justify offering help to people who seek it. There are many gateways into the mind of a person, and there are several methods for supporting behavior change. The problem can be approached from different perspectives: for example, by strengthening certain personality factors, or by deactivating sensitivity to cues. Success depends more on the skill and motivation of the therapist than on the methods used (Luborsky, 1986; Orford, 2004; Wampold, 2001).

## Excess of Excess

Addiction is a condition that resides in the person, but it emerges in society. As Harold Kalant, himself a biologist, points out in this issue, neuroscience can never provide an explanation of how addictions emerge, even if it may discover elements in brain chemistry that resist change once the pattern is affixed. In addictions, nature and culture, the biological and the meaningful, interact. Changes in the body cannot be understood as causes of the behavior any more than the social ones that lead to them (cf. Ylikoski & Pöyhönen, 2015). Addictive behaviors, such as excessive drinking, drug use, gambling—and, to add one emergent type of addiction, internet use—develop from culturally defined and regulated pleasures that must be learned (Rantala & Sulkinen, 2011; Sulkinen, 2007). These pleasures are governed by socially shared and subjectively experienced images related to one’s being in

the world: personal identity, sense of power (McClelland et al., 1972), gender and class, or any other social position (Sulkunen, 1992; Sulkunen, 2002; Sulkunen et al., 1997). These images are a *cultural supplement* to what the body needs, an “excess.” The classical example is food. We eat, not nutrients, but food, which is prepared using technologies provided by culture (fire, pots, ovens, pans, knives, etc.), and enjoyed according to customs regulated by the society in question. Eating disorders result not from dependency on nutrition, which is a biological survival condition, but from disturbances in social regulation of food consumption—for example, an oversupply of added sugar in foods (Lustig, Schmidt, & Bindis, 2012). Intoxication from psychoactive substances (very rarely sought by non-humans) is always socially supplied and regulated. In the Enlightenment, it was classified among “artificial,” as opposed to “natural,” desires (Ruuska, 2012). Intoxication is the behavior that first evoked the medical idea of addiction. Gambling is not possible at all without culture (money, games, rules) and has almost nothing to do with biological needs.

Images connect the pleasures derived from these behaviors with social reality: culture and values, social positions, identities such as religion or nationality, even institutions. For example, in my study of middle-class drinkers in classy bars in Helsinki, I found that sociability was very important to them. However, they criticized lower-class bars in poor neighborhoods for their clientele’s bad manners: in those bars, they said, you are “always bothered by someone who wants to talk to you,” and you cannot even read the newspaper in peace. In this way, they expressed the high value they placed on their personal autonomy. They wanted to be in control of their choice of company, as well as their drinking and everything else. Autonomy was an image they associated with their drinking practices, but it was also a value that defined the social world they wanted to be part of. (Sulkunen, 1992)

The *images* concept, as it was used early on by Boulding (1956) and will be used here, underscores that signification is a multi-layered and interactional process. The term “images” is chosen because visual signs and metaphors condense information more effectively than words. Signs mean something because a signifier—a word, for example—refers to something (the signified), which is interpreted in a certain way (an interpretant) in the language community. Alcohol use is commonly a sign for intoxication, which in many communities is understood as being outside of the everyday normative order—in other words, as transgression. But transgression of what? The sign “drinking” becomes itself a signifier of something, such as a carnival situation, a protest, transition from adolescence to adulthood (Sande, 2000), or other rites to show autonomy and independence (Sulkunen et al., 1997). Also, recreational drug use often articulates values such as competence, individuality, freedom from conventions, or other feelings of superiority (Lalander, 2003). In this way it becomes part of what in semiotics is called *second-order signification*. The middle-class bar patrons in my study told endless stories of drinking experiences, imagined as much as real, that communicated the image of voluntary

sociability they enjoyed in “like-minded company.” The second-order signification of this image was their positive self-definition as autonomous individuals (a definition that later proved ruinous to some of them).

Addiction is an “*excess of excess*.” It does not develop directly out of biological needs but as a response to cultural artefacts, through meaningful images associated with the behaviors. In the addiction process, these images become transformed in the mind of the addict as well as in the minds of others. The connections between the addictive images and social reality are called *resonances* below. Some images governing social behavior may be more addictive than others, such as gamblers’ images of skill as an ability to control chance. Such individualistic images may reinforce chasing the losses, one of the most important pathways to serious gambling problems. Images associated with alcohol as a sign of maturity, autonomy and freedom, common in Nordic and British contexts, are also potentially dangerous for persons who have trouble with their adult identity, as I also observed in the middle-class study.

Recognizing the social origin of addiction does not imply a refusal to also recognize its effects on the body. It transforms the body in ways that are not completely known, but that undoubtedly contribute to the difficulty of regaining control over the addictive desires. In addiction, culture works on the body.

### De-semiosis and Re-semiosis

As addiction arises from the social and ends up transforming the body, it is inherently a process rather than an on-off condition. In the addictive processes the cultural supplements, or images, which are associated with addictive behaviors gradually lose their original “sense” in the addicts’ minds, as well as in the minds of observers. The positive value of autonomy, for example, may turn into escape from control, guilt and shame. Satisfaction of an addicted desire becomes its own function and its sole meaning (*de-semiosis*). It is commonly observed that addicts either do not understand themselves at all (Chantal, Vallerand & Valliers, 1995; Davidson, 1980; see also Borch, 2015, and Heather & Segal, 2015), or they explain their behavior by actor-observer biases. Even the pleasure is often no longer there (Koski-Jännes, 2004).

As addiction advances, the images governing the behavior do not disappear but become transformed (*re-semiosis*). Even if the desire loses its social dimensions, addicts are often reported to be calculating utilitarian planners (e.g., Allaste, 2006) rather than mindless seekers of repeated pleasure or relief. The images also change in the minds of others. The addict can be described as a rotten, dirty, stinking and irresponsible crook, who has indulged too much in pleasures that the body does not really need and has lost control of the experience. Cultural definitions of the behavior do not fit anymore, and the addict seems to lack the characteristics of a subject, as described in Anita Borch’s article in this issue.

## Resonances

### Images of Normal and Pathological Use

Addictions are produced in resonance with images of society in two major ways. The first concerns images of “normal” use and patterns of addiction. Alcohol research has a rich tradition of classifying drinking cultures and the problems that typically occur in them (Room & Mäkelä, 2000). The famous alcoholism types proposed by E.M. Jellinek (1960) constitute one such classification system, which originally (Jellinek, 1954, p. 1976) referred to countries as the drinking cultures that give rise to types. The first type, “the steady symptomatic excessive drinker (with or without addictive features),” later divided into two types called the gamma and delta, is based on the American “Alcoholics Anonymous” adherent, with characteristics including loss of control, withdrawals and difficulty to abstain. The second type, the “inveterate drinker,” is modelled on the image of a French working-class alcoholic who drinks throughout the day but seldom gets intoxicated. The third alludes to the Nordic or British “occasional excessive drinker,” with high rates of absenteeism, accidents, violence and other social problems (Room & Mäkelä, 2000).

Cultural differences can be analyzed from four different perspectives: norms, functions, meanings and use-values (Sulkunen, 2002). The first two are the oldest approaches, referring to, respectively, what is acceptable and what needs drinking satisfies. Bales (1946) distinguished between drinking norms of complete abstinence (Islamic societies), ritual consumption (Orthodox Jews), utilitarian orientation for personal pleasure (American and Western Europe), and convivial (mixture of modern and traditional drinking styles). Utilitarian and convivial cultures give rise to (different types of) alcoholism; the others are safer. This was called the “socio-cultural theory” (Room & Mäkelä, 2000). *Functional* differences have been sought in the psychological (Horton, 1943), nutritional or social needs that alcohol use may satisfy (Mäkelä, 1979). Studies that stress the *meaning* of drinking (or drug use) focus on the second-order signification of identity, or the “whole way of life.” Finally, *use-value* (Sulkunen, 1976) connects drinking with the economy of alcohol supply and living conditions. For example, in France in the early twentieth century, a profuse supply of cheap wine meant that alcohol was an important source of food energy and alcohol-related problems were at high levels. In contemporary urbanized living conditions, with reduced alcohol availability, wine no longer has this use-value to the same extent, and images of wine drinking have also changed. The study of use-values is particularly useful in the study of social change. The use-values of alcohol have implications for how alcohol competes with other drugs (Sulkunen, 1983).

Norms, functions, meanings and use-values are different aspects of how images of normal use are connected with society. They resonate with different patterns of the addiction process. One example is Katainen’s (2010) study of smoking among non-manual and manual workers, where the former justified their practice with images of planned

pleasure and self-control, the latter with images of time-use control at work. Both claimed agency—autonomy and free will—but in different ways. The nicotine metabolism that results is similar, but the pathways to it are different. Another example is provided by Pöysti and Majamäki (2012; Majamäki & Pöysti, 2012) on gamblers. In France, gambling activities are justified as “games of luck” and associated with dreams of extra money. The most common games are different types of lotteries and betting, usually provided in bars. Gambling machines are only available in casinos. In Finland, gamblers dream of improving their skills in controlling chance, not only of the money they might gain. Gambling machines are available in supermarkets, service stations and other public places. Machines reinforce the competence illusion and attract more diverse customers in Finland than in France, whereas gambling for money in France is more closely related to alcohol use. It is likely (although not yet demonstrated) that the profiles of problem gambling are also different in these two countries.

### Attributions and Representations

The second major type of resonance between addiction and society relates to how addiction is seen, defined and handled. *Attributions* are the ways people explain their own or others’ behavior: how they see its causes, and whom they consider responsible. Internal causes are factors within an individual; external causes are in the situation or environment. Social psychologists have been interested in attribution errors, such as the “actor-observer bias” (Jones & Nisbet, 1971) in explaining unintended negative events: “Actors tend to attribute the causes of their behavior to stimuli inherent in the situation, while observers tend to attribute behavior to stable dispositions of the actor” (ibid, p. 93; Malle, 2006). Research shows that addictions are typically governed by such biases, but in different ways in different cultures.

*Social representations* (Moscovici, 1984) are folk beliefs that categorize, interpret and explain reality, to help people cope with unfamiliar and threatening phenomena. Social representations take two forms. *Anchoring* is naming and classifying a strange phenomenon or a new idea using pre-existing categories and images—for example, associating addictive gambling with alcoholism. *Objectification* occurs when an abstract thing is made easier to understand by connecting it to a concrete image, object or action. For instance, addiction is often represented as slavery (one of the etymological roots of the term). Media stories of addicted public personalities are another example.

Research has shown great regional variation in both attribution and representation of addiction. For example, treatment professionals and the general population attribute more severe problems to cannabis in Finland and Sweden than in France and Canada. In the two Nordic countries, cannabis is considered more harmful, dangerous and dependence-producing than alcohol or tobacco (although these actually cause more problems). Legal sanctions against users are stricter, and the people who were interviewed for our study regarded the cannabis problem as

requiring police action rather than prevention or treatment (Sulkunen et al., forthcoming).

Three factors contribute to such differences. First, familiarity of the substance has an effect. In France and Canada, cannabis is more frequently used than in Finland and Sweden, which makes it less frightening. This is called the “fear of addiction,” or, in reverse, the “familiarity” hypothesis. The second factor is related to *collective* representations of the problem, as anchored in previous experience, and objectified in views concerning how addicts should be handled. Michael Egerer (2011; 2013; Egerer et al., 2012) has shown that general practitioners and social workers (not specialized in addiction treatment) interviewed in France anchor their views to the medical tradition of alcoholism treatment in the country. As a consequence, they attribute to medical doctors the responsibility for helping the addict. In contrast, the same groups interviewed in Finland charged the individual with responsibility to change, and emphasized the responsibility of social workers to minimize the harm to others (Sulkunen et al., forthcoming).

The third factor that resonates with images of addiction is the role of individuals in society in general. In Finland, the individual is considered responsible both for the problem and for recovery, whereas in France, society is seen to be responsible. Even problem users in a client population study in Finland (Koski-Jännes, Hirschovits-Gertz, & Pennonen, 2012) endorsed the individualistic model. They did not blame external circumstances for the problem, and they also believed that recovery depends on the patient’s own will and effort (Sulkunen et al., forthcoming).

## Types, Pathways and Boundaries

Whereas a body of studies now exists on attributions and representations of addiction, there is little research on the resonance between images of normal and addicted use. Such research should lead to an analysis of types of addictions and pathways or transitions to addiction. (Jellinek’s original alcoholism types soon turned into stages.). Studies of “the cultural position of alcohol” have focused on the norms, functions and meanings of drinking in different national settings, but little has been done to connect these with alcoholism, or even alcohol problems in general.

The only exception is the “Pathways” model of pathological gambling, by Blaszczynski and Nower (2002). However, this is less a model of pathways than a typology of problem gamblers based on psychological factors. It is widely used in treatment; a study of resonances between normal use and addiction might be more relevant for prevention. For example, the individual competence illusion in Finnish images of gambling, in combination with the wide availability of gambling machines, may explain the relatively high prevalence of problem gambling in that country. Machines support the illusion, and reinforce the risk-prone images of gambling as mastery of chance (Productivity Commission, 1999). The policy

perspective here is obvious (Lund, 2006). Also, the smoking example described above suggests that an effective policy strategy would focus on finding alternative ways to reinforce workers’ sense of autonomy in the workplace and in public health messages.

An advantage of looking at resonances is that it narrows the gap between treatment and prevention paradigms. Reactions to addiction depend on representations and attributions of human behavior that exist in society in other contexts. Addiction itself is on a continuum with normal use; this approach reopens the old issue of how to recognize and define boundaries between normal use and addiction. This bears on the distribution of responsibility and division of labor between professionals and authorities. Here, again, policy perspectives open up, for example, in early intervention and in mini-intervention. Simple numerical thresholds of “heavy use over time” do not address these issues.

One reason for the lack of research on resonance between addiction and normal use might be methodological problems. Alcohol cultures involve so many elements that Room and Mäkelä (2000) recommend a dimensional rather than categorical approach, which would include regularity of drinking and extent of intoxication, and then consider other dimensions according to the study’s purpose and design. Stretching the effort to a spectrum of different addictions further recommends a dimensional approach. Conceptual recognition of the relevant dimensions is in any case necessary.

## Conclusion

The Images Theory of Addiction is a response to the essential challenges that have been brought against the addiction concept. First, the conceptual approach, following Ian Hacking, does not require that addiction must be a unitary condition to be real. Like other generic terms, addiction refers to a variety of phenomena connected with family resemblances. This is an ontological statement. We do not need, and most likely will never see, an etiological theory of brain chemistry that causes addiction. Causation in this context is a complex and multidimensional idea anyway. Neither is it necessary or reasonable to require that there be one (medical or otherwise) therapy that “works.” People can be helped in many ways to change their behavior (and minds). This is no reason to say that their suffering is not real, or that it is not addiction. Yes, addiction is a social construct, like MPD and depression, and as such is likely to change over time. It does reflect the value of self-control and autonomy in modern societies, but this in itself does not imply that the concept has no reference in reality. On the contrary, because addiction is an interactive “kind”<sup>1</sup> with feedback loops to the social

<sup>1</sup> Hacking uses the term “kind” for generic concepts that refer to abstract objects. Interactive kinds, such as addiction, have social consequences (treatment vs. punishment vs. moral condemnation), whereas non-interactive kinds, such as quarks, are not influenced by theoretical knowledge about them. The notion of kind stems

processes that it governs, to the way the concept is anchored and objectified, and to how causes and responsibility for it are attributed, the use of the concept has real consequences for the experience and handling of addicts. Finally, and most importantly, understanding addiction as a product of society that ends up working on the body in no way puts all the eggs in the treatment basket, or puts the origin of the problem in individual dispositions. Recognizing that addiction is one problem among many does not deny the importance of preventing the whole spectrum of harm, including harm to others. Resonance between images of normal use and the addiction process is a much under-researched area, but has high relevance for prevention, not least for regulating the supply of potential sources of addiction.

### Acknowledgement

Research for this article was supported by the Helsinki Collegium for Advanced Studies, a consortium grant *Theories and Images of Addiction* from the Academy of Finland, and a grant from the Finnish Ministry of Social Affairs and Health. I wish to thank the researchers of the Consortium for their work. Special thanks are due to Professor Anja Koski-Jännes, one of the Consortium leaders, for her contributions to the Images Theory of Addiction.

### References

- Allaste, A. -A. (2006). *Drug cultures in Estonia: Contexts, meanings and patterns of illicit drug use*. Faculty of Social Sciences, Department of Sociology, University of Helsinki.
- Bales, R. F. (1946). Cultural differences in the rates of alcoholism. *Quarterly Journal of Studies on Alcohol*, 6, 480–499.
- Blaszczynski, A., & Nower, L. (2002). A pathways model of problem and pathological gambling. *Addiction*, 97, 487–499.
- Boulding, K. E. (1956). *The image: Knowledge in life and society*. Ann Arbor, MI, United States: University of Michigan Press.
- Campbell, N. D. (2007). *Discovering addiction: The science and politics of substance abuse research*. Ann Arbor, MI, United States: University of Michigan Press.
- Chantal, Y., Vallerand, R., & Vallières, E. (1995). Motivation and gambling involvement. *The Journal of Social Psychology*, 135(6), 755–763.
- Davies, J. B. (1997). *The myth of addiction* (2nd ed.). Reading, UK: Harwood Academic.

- Davidson, D. (1980). How is weakness of will possible? In D. Davidson (Ed.), *Essays on actions and events* (pp. 21–42). Oxford, UK: Oxford University Press.
- Egerer, M. (2011). Alcoholism, brief intervention and the institutional context: A focus-group study with French and Finnish general practitioners. *Critical Public Health*, 22(3), 307–318. doi:10.1080/09581596.2011.637901
- Egerer, M., Hellman, M., & Sulkinen, P. (2012). Autonomy and protection in the welfare state: Finnish social workers' views on alcohol problems. In M. Hellman, G. Roos, & J. von Wright (Eds.), *A welfare policy patchwork: Negotiating the public good in times of transition* (pp. 203–222). Helsinki, Finland: NVC.
- Egerer, M. (2013). Problem drinking, gambling and eating—three problems, one understanding? A qualitative comparison between French and Finnish social workers. *Nordic Studies on Alcohol and Drugs*, 1–2, 67–86.
- Ferentzy, P. (2002). Foucault and addiction. *Telos*, 2002(125), 167–191.
- Fingarette, H. (1988). *Heavy drinking: The myth of alcoholism as a disease*. Berkeley, CA, United States: University of California Press.
- Hacking, I. (1998). *Rewriting the soul: Multiple personality and the sciences of memory*. Princeton, NJ, United States: Princeton University Press.
- Heather, N., & Segal, G. (2015). Is addiction a myth? Donald Davidson solution to the problem of akrasia says not. *International Journal of Alcohol and Drug Research*, 4(1), 77–83.
- Horton, D. (1943). The functions of alcohol in primitive societies: A cross-cultural study. *Quarterly Journal of Studies on Alcohol*, 4, 199–220.
- Jellinek, E. M. (1954). *International experience with the problem of alcoholism*. Document WHO/MENT/58, WHO/APD/ALC/12. Geneva, Switzerland: World Health Organization.
- Jellinek, E. M. (1960). *The disease concept of alcoholism*. New Haven, CT, United States: Hillhouse Press.
- Jellinek, E. M. (1976). Jellinek working papers on drinking patterns and alcohol problems. R. E. Popham (Ed.). Toronto, ON: Addiction Research Foundation.
- Jones, E. E., & Nisbet, R. E. (1971). *The actor and the observer: Divergent perceptions of the causes of behavior*. New York, NY, United States: General Learning Press.
- Katainen, A. (2010). Social class differences in the accounts of smoking—striving for distinction? *Sociology of Health & Illness*, 32(7), 1087–1101.
- Klingemann, H., Sobell, L. C., Barker, J., Blomqvist, J., Cloud, W., Ellinstad, T., . . . Tucker, J. (2001). *Promoting self-change from problem substance use*. Dordrecht, Boston, London: Kluwer Academic Publishers.
- Koski-Jännes, A. (2004). In search of a comprehensive model of addiction. In P. Rosenqvist, P. J. Blomqvist, A. Koski-Jännes, & L. Ojesjö (Eds.), *Life-courses and addiction* (pp. 49–67). Helsinki, Finland: NAD Publication.
- Koski-Jännes, A., Hirschovits-Gerz, T., & Pennonen, M. (2012). Population, professional and client support for

---

from Wittgenstein's philosophical idea that words do not get their meaning from exact definitions or measurable theories but from "family resemblances" between occurrences of the abstract objects to which they refer, such as "bird," "game," etc. No single feature of a game, such as football or lottery, is shared by all other games.

- different models for managing addicted behaviors. *Substance Use and Misuse*, 47, 296–308.
- Lalander, P. (2003). *Hooked on heroin: Drugs and drifters in a globalized world*. Oxford, UK: Berg Publishers.
- Levine, H. (1978). The discovery of addiction: Changing conceptions of habitual drunkenness in America. *Journal of Studies on Alcohol*, 39(01), 143.
- Luborsky, L., Crits-Christoph, P., McLellan, A. T., Woody, G., Piper, W., Liberman, B., . . . Pilkonis, P. (1986). Do therapists vary much in their success? Findings from four outcome studies. *American Journal of Orthopsychiatry*, 56(4), 501–512.
- Lund, I. (2006). Gambling and problem gambling in Norway: What part does the gambling machine play? *Addiction Research and Theory*, 14(5), 475–491.
- Lustig, R. H., Schmidt, L., & Brindis, C. (2012). The toxic truth about sugar. *Nature*, 482, 27–29. doi:10.1038/482027a.
- Lukes, S. (2005). *Power: A radical view*. Houndmills, UK: Palgrave. (First published in 1974.)
- Lupton, D., & Petersen, A. (1996). *The new public health: Health and self in the age of risk*. London, UK: Sage.
- Majamäki, M., & Pöysti, V. (2012). Vocabularies of gambling justification among Finnish and French active players. *Journal of Cultural Studies*, 15(4), 496–512.
- Malle, B. F. (2006). The actor-observer asymmetry in attribution: A (surprising) meta-analysis. *Psychological Bulletin*, 132, 895–919.
- McClelland, D., Davis, W., Kalin, R., & Wanner, R. (1972). *The drinking man: Alcohol and human motivation*. New York, NY, United States: The Free Press.
- Moscovici, S. (1984). The phenomenon of social representations. In R. M. Farr, & S. Moscovici (Eds.), *Social representations* (pp. 3–69). Cambridge, UK: Cambridge University Press.
- Mäkelä, K. (1979). A note on holocultural generalizations and historical fluctuations in aggregate drinking. Reports from the Social Research Institute of Alcohol Studies No 131. Helsinki, Finland.
- Orford, J. (2004). How appetites become less excessive: Illustrations from the clinic and the community. In P. Rosenqvist, J. Blomqvist, A. Koski-Jännes, & L. Öjesjö (Eds.), *Addiction and life course*. Helsinki, Finland: NAD Publication No. 44.
- Productivity Commission. (1999). *Australia's gambling industries*. Report No. 10. Canberra, Australia: AusInfo.
- Pöysti, V., & Majamäki, M. (2013). Cultural understandings of the pathways leading to problem gambling: Medical disorder or failure of self-regulation? *Addiction Research & Theory*, 21(1), 70–82.
- Rantala, V., & Sulkunen, P. (2012). Is pathological gambling just a big problem or also an addiction? *Addiction Research & Theory*, 20(1), 1–10.
- Room, R., Hellman, M., & Stenius, K. (2015). Addiction: The dance between concept and terms. *International Journal of Alcohol and Drug Research*, 4(1), 27–35.
- Rehm, J., Marmet, S., Anderson, P., Gual, A., Kraus, L., Nutt, D. J., . . . Gmel, G. (2013a). Defining substance use disorders: Do we really need more than heavy use? *Alcohol and Alcoholism*, 48(6), 633–640. doi:10.1093/alalc/agt127.
- Rehm, J., Marmet, S., Anderson, P., Gual, A., Kraus, L., Nutt, D. J., . . . Gmel, G. (2013b). The tangible common denominator of substance use disorders: A reply to commentaries to Rehm et al (2013a). (Letter to the editor.) *Alcohol and Alcoholism*, 49(1), 118–122.
- Room, R., & Mäkelä, K. (2000). Typologies of the cultural position of drinking. *Journal of Studies on Alcohol*, 61, 475–483.
- Ruuska, A. (2012). *Habitual drunkenness and the discovery of the "social": Benjamin Rush and Thomas Trotter revisited*. Paper presented at The 38th Annual Alcohol Epidemiology Symposium of the Kettil Bruun Society, 4-8 June 2012, Stavanger, Norway.
- Sande, A. (2000). Den norske russefeiringen. Om meningen med rusmiddelbruk sett gjennom russefeiring som ritual [The Norwegian ruse celebration about the meaning of drug use seen through graduation celebration as a ritual]. *Nordisk Alkohol- & Narkotikatidskrift*, 17(5–6), 340–354.
- Sulkunen, P. (1976). Drinking patterns and the level of alcohol consumption: An international overview. In R. J. Gibbins (Ed.), *Research advances in alcohol and drug problems* (Vol. 3). (pp. 223–281). New York, NY, United States: John Wiley & Sons.
- Sulkunen, P. (1983). Alcohol consumption and the transformation of living conditions: A comparative study. In R. Smart (Ed.), *Research advances in alcohol and drug problems* (Vol. 7). (pp. 247–297). London, UK: Plenum Publishing Corporation.
- Sulkunen, P. (1992). *The European new middle class: Individuality and tribalism in mass society*. Aldershot, UK: Avebury Academic Publishers.
- Sulkunen, P. (2002). Between culture and nature: Intoxication in cultural studies of alcohol and drug use. *Contemporary Drug Problems*, 29, 253–276.
- Sulkunen, P. (2007). Images of addiction: Representations of addictions in films. *Addiction Research & Theory*, 15(6), 543–559.
- Sulkunen, P., Alasuutari, P., Nätkin, R., & Kinnunen, M. (1997). *The urban pub*. Helsinki, Finland: Stakes.
- Sulkunen, P., & Warsell, L. (2012). Universalism against particularism: Kettil-Bruun and the ideological background of the Total Consumption Model. *Nordic Studies on Alcohol and Drugs*, 29(3), 217–232.
- Sulkunen, P., Koski-Jännes, A., Egerer, M., Hellman, M., Hirschovits-Gertz, T., Katainen, A., . . . Ruuska, A.: Images and theories of addiction. *Working papers of images and theories of addiction*, 4. Department of Social Research. Forthcoming.
- Valverde, M. (1998). *Diseases of the will: Alcohol and the dilemmas of freedom*. Cambridge, UK: Cambridge University Press.
- Ylikoski, Petri & Pöyhönen, Samuli (2015). Addiction-as-a kind hypothesis. *International Journal of Alcohol and Drug Research*, 4(1), 21–25.
- Volkow, N. D., & O'Brien, C. (2007). Issues for DSM-V: Should obesity be included as a brain disorder? *The American Journal of Psychiatry*, 164(5), 708–710.