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Supranational changes in drinking patterns: Factors in explanatory models of substantial and parallel social change¹

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Abstract. That there have been “long waves of consumption” in parallel in different societies was noted in 1981, in the wake of a 30-year rise in drinking in European and other societies with a strong temperance history. In the last 30 years, there has been a long fall in consumption in southern European wine cultures. Now there is a sustained drop in drinking among youth in most of Europe, Australia and north America. Can such changes be understood in a common frame? In terms of inexorable historical phenomena or forces, like Kondratieff waves? In terms of a dialectic between market interests and government policies to limit public harm? In terms of generational shifts, with a younger generation reacting against the habits of an older? Such conceptual models for understanding the dynamics of social change are examined and compared in terms of their potential contribution in explaining how substantial changes in levels of consumption occur, and when and how they are roughly in concert in different societies.

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Introduction

In 1981, the International Study of Alcohol Control Experiences (ISACE), describing uniformly upward trends in the level of drinking in the postwar period in seven societies in western Europe and north America, noted that one could talk in terms of “long waves of alcohol consumption”: downward in the late 19th and early 20th centuries, and upward in the 1950s-70s. The study noted that the trends were “surprisingly common across countries, despite differences in the countries’ general economic development and in alcohol culture”, and that “none of the factors commonly put forward as explanations for drinking or problematic drinking – such as buying power, the amount of leisure time, social misery, or industrialization and urbanization -- present patterns of variation over time similar to the variations in alcohol consumption” (Mäkelä et al. 1981, p. 7).

Later work by members of the group and by others established that these findings of parallel long waves of alcohol consumption were bounded. The seven societies in the ISACE study were all what Levine (1992) calls “temperance cultures” – where there had been strong popular anti-alcohol movements in the late 19th and early 20th centuries. The downturn in consumption at that time, for instance, was not seen in southern European wine cultures, where such popular movements had been weak or negligible (Anderson, Baumberg 2006, p. 40), and neither was there a rise in consumption there from the 1950s on (Sulkunen 1989; Allamani et al. 2010). Of course, this does not mean that there have not been changes in consumption in Southern European wine cultures which might be conceived as long waves (see for example, Allamani et al. 2014); but the timing has been different from the long waves in the temperance cultures described in the ISACE study.

It remains broadly true that parallel changes in levels of drinking can be found between different societies within some bounds, and that there has been relatively little systematic exploration of explanations for the parallelism in the changes. The issue has emerged again with the widespread current downward trend among teenagers in drinking at all, and in level of drinking. This time the parallel trends extend beyond the bounds found for rising consumption in the 1950s-1970s. In most high-income countries and in some middle-income countries, alcohol consumption by teenagers has been falling – both in terms of the proportion drinking at all at a given age, and in terms of the level of drinking (Kraus et al. 2018) – a trend which has been noted not only in Europe, but also in North America and Australia (de Looze et al. 2015; Pennay et al. 2018). In a number of countries, the trends have been confirmed by age-period-cohort studies, finding downturns in drinking particularly in the youngest cohort (e.g., Meng et al. 2014; Kraus et al. 2015). There are minor variations in timing; in some countries where the trend has been under way for some time, there is evidence that the trend extends upward as the teenage cohort ages, in comparison to the level of drinking of previous cohorts at that age (Livingston et al. 2018). In the context of these findings, the issues raised by “long waves of consumption”, and particularly by parallel waves across societies, have re-emerged (Kraus et al. 2019).

This paper considers where we stand in terms of analyses relevant to characterising and explaining such parallel changes across societies, and how age cohorts figure into such changes.

Analyses of parallel long waves in other contexts

In social science in general, there have been analyses in diverse contexts relevant to such parallel changes across societies. In economics, a primary literature has been in terms of “Kondratieff waves” of economic growth, with a periodicity of 45-60 years. Such “long waves” were first analysed in the 1910s and 1920s. Examining the record in industrialised economics over several

centuries, shorter-period waves in economic growth have also been found, in terms of “Kuznets swings” of 18-25 years, as well as commonly recognised “business cycles”, often in a 5-10 year period (Kleinknecht 1992). A detailed analysis of US data on economic growth 1889-1987 found fluctuations in the Kondratieff period-range, but also shorter fluctuations, depending on the type of investment or productivity indicator focused on (Menshikov 1992).

Explanations of the Kondratieff waves and of shorter fluctuations have generally looked in two directions: to internal mechanisms in the economic system and to external shocks to the system – notably, the effects of technological and other innovations (Menshikov 1992). Technological revolutions are commonly presented as the major factor initiating a new upward shift (Grinin et al. 2016, p. 145), while the downward shift is seen as occurring as new ways of exploiting the innovation are exhausted. Although technological revolutions have commonly crossed national borders, and there are clear parallels between the waves in different nations, the emphasis in the economic analyses has tended to be on the patterning over time, rather than on patterning between the waves in different societies. Each technological revolution, stretching across borders, is seen as responsible for the synchronisation of the upwards shift, with greater synchronicity as cross-border trade and travel have increased and communications has speeded up. But, in the absence of a world war or a widespread economic depression, downward shifts tend to be seen as reflecting inherent processes in a national economy, rather than as linked across societies.

Exploration of Kondratieff-like waves of activity in fields other than economic development has not been common, although Angelo and Vormann (2018) have recently published a study of long waves of “urban reform discourses” in terms of Kondratieff-type waves. Again, their emphasis is on technological revolutions in building and transportation as a driving force in periodic waves of urban reform thinking, although along with this the analysis emphasises the recurrence in new waves of discourses and tropes also used in earlier waves.

A more sociological literature has focused on generational change – on changes between generations in mores, behaviours and views of the world. Serious sociological discussions of change between generations were initiated by Mannheim and Elias (Connolly 2019), but with a primary emphasis on conflict between generations, focusing on post-First World War Germany. A later literature in the alcohol field focused on the slightly earlier American “Lost Generation”, literary and bohemian – a subgroup of a generation which served as the lodestars for the post-First World War generation’s upward wave of US alcohol consumption (Room 1984, 1989).

In general social science, there has been considerable attention more recently to another rebellious generation, that of the 1960s (e.g., Horn 2007; Jones and O’Donnell 2012). In the alcohol field, Pekka Sulkunen focused on the “wet generation” of Finnish youth in this period, leading the increase in alcohol consumption there (Sulkunen 1983). While many such analyses focus on a particular society, there is often recognition that parallel changes were occurring more broadly. Thus parallel shifts can be found in other industrialised countries to the changes in courtship and sexuality in the U.S. starting in the 1920s and again in the 1960s which were analysed by Bailey (1989, 1999), with the later wave analysed also quantitatively by Twenge et al. (2015). A recent analysis of changes in norms concerning individual choice in sexuality and gender roles, drawing on repeated population surveys in 80 countries from 1981 to 2014, found strong shifts towards individual-choice norms in a majority of the societies, including all the high-income countries in the study (Ingelhart et al. 2017). Particularly in the surveys earlier in the timespan, it was the younger cohorts that led the way in individual-choice preferences.

There seems to have been little analysis drawing together these two frames for studying social change – studies of long waves of change, and of generational cohorts as initiators or bearers of change. And the third dimension of concern -- parallels in change and patterns of influence across societies – has been there around the edges in both research traditions, but not usually a focus. This paper discusses what can be said about the operation of all three of these dimensions in changes in alcohol consumption.

Understanding parallel long waves in alcohol consumption

Underlying the long waves: While the long waves of alcohol consumption may end up with the approximate temporal periodicity of Kondratieff waves, they seem often to result from different processes from those described for economic development. As in the Kondratieff waves, the rise in alcohol consumption in the 18th and early 19th centuries reflected technological revolutions, with the industrialisation of beer and spirits production early in the industrial revolution. Whether in “home markets” or in colonial possessions, alcoholic beverages became a mainstay of the imperial economy in the later stages of European empire-building (Courtwright 2001; Room et al. 2002, pp. 23-27). Thus, for instance, Gandhi’s anti-alcohol campaign was an initiative aimed not only at nation-building, but also at diminishing a primary source of revenue for Britain’s Indian empire (Fahey, Manian 2005). In more recent times, alcoholic beverage production and distribution has continued to be subject to occasional technological revolutions, though smaller in scope than the industrial revolution. For instance, the packaging of beer in cans and bottles transformed its distribution and eased the way for consolidation of the market in the U.S. after World War II (Fogarty 1985). More recently, there have been innovations in the packaging of wine: the introduction of metal-screw-tops to replace corks, and the invention and adoption of the “bag-in-box” wine carton. At this point in Sweden, a majority of wine (now the largest source of alcohol for Swedes) is bought in bag-in-box cartons (Ramstedt, Trollidal 2017). But such technological innovations do not seem to have been a strong impetus in modern times, for instance in the rising wave of consumption in the post-World War II period studied in the ISACE project (Mäkelä et al. 1981).

A recent historical analysis drawn from the AMPHORA study (Gual, Anderson 2011) pointed to temporal connections between alcohol consumption levels and selected social and economic factors in twelve countries spread across Europe (Voller et al. 2014). They found a general increase in wellbeing across Europe between the 1960s and 2000s, which “has had an impact both on lifestyles and on daily life” (pp. 1526), but that relationships with trends in drinking varied by country; there were “different changes in amount and pattern of drinking according to the country values, norms and traditions”.

In the downward portion of alcohol consumption waves observed in temperance cultures, the main impetus seems often to have been dialectic, reflecting a delayed social and often societal reaction to the increased harms from the high consumption at the crest of the wave (Room et al. 2009). Conversely, the lower rate of alcohol-related problems when consumption has been reduced has eventually resulted in a relaxing of regulations and informal controls, so that -- as the lessons from the peak of the wave are forgotten -- consumption moves back up again (Greenfield et al. 2007). The long periodicity of the waves has reflected both the often-delayed timing of effective societal responses to problems of everyday life and that what is to be changed affects behaviour that is both habit-forming and part of the fabric of routine sociability.

The generational dimension: Waves of change in drinking often start with a particular cohort of teenagers and young people up to about age 25. This cohort seems often to be in the vanguard of the changes, whether upward or downward. That the change starts with a particular cohort at the

beginning of their drinking career can be seen as reflecting that such changes in a potentially habitual behaviour are most easily made at the inception of or early in a drinking career. Age-period-cohort studies in various countries have found evidence of current substantial reductions in drinking in this age group, compared with previous birth-cohorts (e.g., Kerr et al. 2013; Meng et al. 2014; Kraus et al. 2015; Livingston et al. 2016). But the diverse aspects of drinking as a behaviour mean that the pattern of change can vary. In recent years, for instance, there seems to be a trend at least in Australia for women in middle and older age to drink more than previous cohorts at that age (Stanesby et al. 2018). Several possible explanations could be offered for this: that they are in better health than earlier cohorts and that it was declining health that used to dictate reductions in drinking at their age (Liang, Chikritzhs 2011); that they are more likely than women in earlier cohorts to have continued in the workforce, and that this in one way or another encourages a continued pattern of drinking; or that as “children of the 1960s” they are still a little rebellious, somewhat emancipated from traditional gender roles, and not inclined to subside into a settled old age.

Parallels in the trends in diverse societies: We may hypothesise that parallels in trends between societies will tend to increase in the current era, because of increases in globalisation on several dimensions. One dimension is the increased globalisation of alcohol production, distribution and marketing; the globalised actors apply what they have learned in one market in others. There is also increased communication and learning through professional and scholarly linkages. And, of course, there are the media and now the internet, spreading knowledge of how counterparts elsewhere are thinking and acting.

Explaining a downward change in a particular birth-cohort in diverse societies

In the current historical moment, the major trend which asks for an explanation is the substantial drop in teenage and young adult drinking in a wide range of higher-income countries, reaching across the boundaries, such as between northern and southern Europe, where trends in alcohol consumption have often differed (de Looze et al. 2015). In northern Europe, this might be seen as a reaction against the heavier drinking of the parental generation; but this seems unlikely in southern European wine cultures, where there had already been a substantial drop in consumption when the parental generation were themselves young (Allamani et al. 2010). The decline in youth drinking preceded the Global Financial Crisis of 2007 in most countries, ruling it out as a factor. It is also the case that top-down responses, such as regulation, cannot be leant upon to explain these trends given the concentration of changes in a particular subpopulations, young people, and the concurrent liberalisation of alcohol control policy, at least in terms of availability, in the affected countries (Lintonen et al. 2013; Pennay et al. 2015). Other potential contributing causes, occurring throughout higher-income societies, seem more likely.

The primary candidate for a factor which applies across the diverse range of societies in which the downturn in youth drinking has occurred is the technological revolution of the electronic web. The advent of the web and the wide spread of access to it symbolised by handheld smart phones have been potent changers of interactional and other behaviour -- particularly for teenagers, growing up with the new technology, rather than adapting like their elders to the technology's implementation. It has thus been a particularly potent influence on children and youth, giving them often unmediated connections to the worlds beyond the family and school, providing a ready means of instant communication with friends and others, but also diminishing privacy within the family and close relationships.

A primary function of alcohol is as a medium of sociability. It is most often consumed in company with others. While drinking together may be the primary activity, often it is accompanied by or secondary to other social activities: for instance, game-playing, commensal snacking and meal-

eating, flirting and courtship. The drinking in the occasion often carries considerable symbolic meaning, as in a toast, a drink together to symbolise the completion of a commercial agreement, or an offer of a drink as a part of courtship. Where participating in the drinking is an expectation of the social world, a participant may feel required to drink even when inclined otherwise (Room et al., 2016). These meanings may be specific to a culture, or indeed to a particular subculture or social world. But in the present-day world, the customs and meanings may be conveyed far and wide by media and the internet.

In most cultural circumstances, norms concerning drinking differ by age. In particular, in most cultures it is thought inappropriate for a child to be drinking; drinking is thus defined as an “adult” behaviour. What this means in practice varies by culture and by era. But in societies or social worlds where adult drinking is common, and drinking is not allowed or discouraged for children, drinking takes on an added meaning for teenagers and youth as a claim on and acting out of adult status (Room 2004). That drinking norms also differ to a greater or lesser extent by gender, and that drinking is defined in many cultures as facilitating sexuality (e.g., Ferris 1997), also adds significance to drinking as a social behaviour, particularly for those in their early years of drinking.

The advent of electronic connections through the web and smart phones is a major force in recent years disrupting customary sociability and interpersonal connections. The changes seem to have been strongest among who have been teenagers or youths in these years. Sociable interactions are much less than before a matter of physical contiguity (Suler 2016; McCuddy 2018) – and interactions at a distance are less likely to involve drinking together, whether as a symbol of commensality or as a means of lowering discursive and physical boundaries. The electronification of much sociability seems to have weakened some functions of intoxication which had been particularly important for youth.

It should be noted that a recent analysis of the multinational Health Behaviour in School-aged Children data across 25 societies found that national declines in teenage alcohol consumption between 2002 and 2014 were associated with declines in face-to-face contact with peers, but not with increases in electronic media communication, and that the study found no significant relationship between increased electronic media communication and lessened drinking among teenagers (de Looze et al. 2019). We may hypothesise that the web interacts with and can influence teenage and youth drinking in diverse ways, mostly pointing in the direction of less rather than more drinking.

- Drinking in the age-group is primarily social and reciprocal, a medium for sociability, for sharing and exploring together among friends, a facilitator of expression of feelings and of sexual connection. But drinking’s role in such social interactions is primarily to express commensality and to lower inhibitions, and it is considerably less likely to be invoked for these facilitating roles when the communication is electronic rather than proximal and embodied.
- Qualitative studies have reported that the stories afterwards about exploits while drunk often feature in humour and sociability among close friends. But there is evidence that teenagers and youth try to avoid representations of their drunken behaviour reaching a wider audience (e.g., Törrönen et al. 2019, Truong 2018), and this motivation may limit drinking when and where others may capture it on a phone or electronic device. On balance, when handheld phones are around they may constrain drinking behaviour.
- The internet also facilitates family communication and tracking of each other, so that the world of the teenager is more open to the parental eye than in previous generations. This may discourage or make less likely behaviours such as intoxication which are questionable to a parent (de Looze et al. 2017; Raitasalo et al. 2018). The availability of electronic

entertainment through the web may substitute for do-it-yourself excitements such as experiments with intoxication.

- How young people use digital networking applications may reorganize young people's face-to-face practices of partying so that there is less focus on drinking (Törrönen et al. 2019).

Interacting with this technological change may be changes in social presentation and interaction – in habitus, to use Norbert Elias' term (Elias 2000; Sapiro 2015) – particularly as expressed in terms of relationships between parents and their teenagers (Törrönen et al. 2019; de Looze et al. 2017), with more open and closer relationships between the generations (Kraus et al. 2019). This change can be seen as related to a shift towards “postmaterialist values”, with greater acceptance of individual choices, in multiple societies in recent decades (Inglehart et al. 2017). That the electronic web revolution is affecting social behaviour potentially involving social drinking is readily apparent, though the net result of the effects is not settled. There is also some evidence on related potential changes in social presentation and interaction, and on changes in relation with parents.

Future research directions

It is not possible to develop an experiment to identify causal factor(s) to account for the global downward shift in youth alcohol consumption in high-income countries. What can be achieved, however, is a better understanding of the social, economic and cultural climate of the new millennium, so that the current downward shift in young people's drinking we are observing can be situated within its point in history. As Sulkunen (2002) reminds us, there are many historical examples where new meanings are given to alcohol, and changes in practices often represent more complex social issues than those directly related to drinking. It is potentially productive to focus on the generational aspects of drinking, including but not limited to generational remembering and forgetting– today's young people are, after all, the offspring of heavy drinking Baby Boomers and Generation Xers (Livingston et al. 2016). Situating the current wave within both its accompanying digital-based technological revolution (echoing Kondratieff), alongside important social generation considerations (echoing Mannheim), will be important in future avenues of research, along with taking account of the social, economic and political conditions impacting young people, and acknowledging the role of culture and subjectivities in meaning-making related to alcohol.

To the extent that increased time spent using the web and engaging in social media is changing perceptions and practices related to alcohol, this topic should be a priority for future research efforts. For example, substitution between intoxicants is often a consideration when exploring alcohol trends and evaluating the effectiveness of policy (Moore 2010), and while today's young people do not appear to be substituting alcohol with other drugs (Vashishtha et al. 2019), they may be substituting web-based forms of intoxication for alcohol intoxication. And it may be that less face-to-face interaction, while positively influencing harmful consumption in one direction, is negatively influencing well-being in another. Given also the fact that the alcohol industry has shifted a significant load of their marketing to online spaces (Nicholls 2012), research on the varied and complex interactions between drinking and digital technology use is needed.

While we know that youth drinking has been declining fairly uniformly across high-income countries, less is known about how youth are drinking in lower and middle-income countries, although in countries where commercial alcohol markets are developing, there is good reason to suggest youth drinking will increase before it decreases. Unfortunately, quality repeated cross-sectional data are not as available from lower and middle-income countries (Pennay et al. 2018). However, it would be

useful to explore what is different about the situation of youth in higher-income countries that are bucking the trend, for example, countries such as Croatia, the Czech Republic, France and Greece. Indeed, in the tradition of the ISACE and AMPHORA studies, much can be learned from exploring waves between countries over time and relating these waves to concurrent changes in social, cultural, economic and policy factors. Often it is with hindsight that waves in alcohol consumption become clearly linked to identifiable shifts in societal circumstances and cultural traditions, and cross-cultural comparative research is essential for a better understanding of the waves and their determinants.

Conclusion

Although economic factors are important in many long-wave changes in behaviour, the timing and consistency of the recent changes in youth drinking behaviour, across societies with differing economic trajectories, suggest that economic factors are not an important part of the explanation – as has also been argued concerning the previous “long waves” of alcohol consumption in the 19th and 20th centuries (Mäkelä et al. 1981). Secular changes in the realm of habitus – of social presentation and interaction -- and in particular changes in the intergenerational relations and interactions in family life, may well figure in the changes in youth drinking, as argued by Kraus et al. (2019). But the evidence is not strong on how widespread such changes may be. As a factor with broad effects on behaviour which is widely dispersed across societies, the advent and broad impact on daily life in all high-income countries of the worldwide web points to it as a leading factor in the widespread decline in youth alcohol consumption.

But while there is some evidence of the changes in drinking being carried forward to the early 20s as the birth cohorts age, the extent to which changes at the teenage and youth life-stage carry through to later ages is a question for the future. Another important unknown is whether and how the drinking practices of today’s young people will develop in later life and the extent to which they will be passed on to their children. If indeed, changes in the media for and styles of communication have contributed to the decline, along with concern about self-presentation, this suggests a more enduring change. However, lessons from history tell us that alcohol consumption waves ebb and flow, that technological revolutions are responded to, and that every now and then a generation reacts to and rebels against the ways of their elders.

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