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# The framing of alcohol in (non-)sponsored movies: A comparative content analysis of alcohol advertising and portrayals in sponsored and non-sponsored Dutch movies

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## Abstract

**Aims:** Alcohol advertising, in the form of product placement, has been shown to influence the viewer's alcohol consumption. However, it is not just the portrayal itself that affects behavioural outcomes; the particular message that is conveyed in an alcohol portrayal may actually influence consumer behaviour in a manner known as "framing". Therefore, the prevalence and framing of alcohol portrayals in movies was investigated by focussing on product placement strategies, several portrayal characteristics and compliance with relevant guidelines/laws. Furthermore, a comparison is made between movies sponsored by an alcohol brand and non-sponsored movies.

**Methods:** Sixteen Dutch movies (of which 50% were sponsored) underwent content analysis using a four-category, 21-item coding scheme. Alcohol was present in every movie and a total of 937 alcohol portrayals were analysed.

**Findings:** The results show that the alcohol portrayals were predominantly positive. In the sponsored movies, more liquor was consumed and alcohol portrayals had a lower plot connection.

**Conclusions:** In general, the differences between alcohol portrayals in movies sponsored by an alcohol brand compared with non-sponsored movies were rather small. However, the portrayals sometimes offend the legislation regarding regular alcohol commercials, and given the effects of alcohol portrayals on young viewers, this needs attention.

## Keywords

Alcohol marketing, alcohol portrayals, sponsoring, framing, product placement, movies

## History

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## Introduction

Popular media are often identified as potential sources through which young people learn about alcohol, potentially affecting their drinking and drinking problems (c.f. Social Cognitive Theory; Engels, Hermans, Van Baaren, Hollenstein, & Bot, 2009; Hanewinkel et al., 2014). Although, along with tobacco advertising, alcohol advertising is one of the most highly regulated forms of marketing, (young) people are frequently exposed to alcohol portrayals and promotions via mass media including television, radio and movies (e.g. Anderson, De Bruijn, Angus, Gordon, & Hastings, 2009; Thorens, Khan, Khazaal, & Zullino, 2012). To illustrate, 83% of high-grossing movies from the US depict alcohol use (including 57% of G and PG-rated movies) of which 52% had a reference to specific alcohol brands (Dal Cin, Worth, Dalton, & Sargent, 2008). Increasingly these

portrayals are a result of alcohol sponsoring as, next to more traditional marketing activities, alcohol producers spend two to three times their measured media expenditures in unmeasured promotions such as sponsorships (Federal Trade Commission, 1999). By associating their brand with a television show, series or movie at a selected audience, sponsors aim to enhance goodwill for their brand (d'Astous & Seguin, 1999). Contrary to product placement strategies, with sponsorships, references to a sponsor can be shown; however, such references are not necessarily part of the plot of the programme (EUR-Lex, 2010). There have been many studies that focussed on the contents of alcohol portrayals in general (see for e.g. d'Astous & Seguin, 1999; Everett, Schnuth, & Tribble, 1998; Hanewinkel et al., 2014); however, despite the popularity of sponsoring among alcohol marketers, there is little scientific knowledge regarding the specific contents of sponsored alcohol portrayals. Therefore, the objective of this study is to investigate the contents of alcohol portrayals in Dutch movies by focussing on possible differences in alcohol portrayal in movies sponsored by an alcohol brand (alcohol advertising) and non-sponsored movies.

Differences between sponsored and non-sponsored alcohol portrayals are likely to exist, due to commercial interests that brands have in sponsoring movies or television programmes, movies sponsored by an alcohol brand. For example, they

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may contain less content about the negative effects of alcohol and depict more positive messages about alcohol compared with movies that are not sponsored by an alcohol brand (Bloxham, 1998; Buda & Zhang, 2000; Cornwell et al., 2005; Meenaghan, 2001). More specifically, alcohol brands that sponsor a movie can have a say in the way their product is portrayed in a movie because brands and movie writers collaborate (Russell, 2002). As a consequence, movies sponsored by an alcohol brand may contain more positive messages about alcohol compared with movies that are not sponsored by an alcohol brand.

### The framing of alcohol

It is not just the portrayal itself that affects behavioural outcomes; the particular message that is conveyed in an alcohol portrayal may influence consumer behaviour in a manner known as ‘framing’. The ultimate objective of framing is to influence consumers’ thoughts and consequently influence their decision-making process (Rothman & Salovey, 1997). Framing can occur with alcohol portrayals in movies because the way alcohol is portrayed can make it more salient to audiences. Alcohol portrayals can, for example, be presented positively or negatively, and this can affect attitudinal and behavioural outcomes. In general, negative framing has been found to be more effective when the level of elaboration is high, while positive framing tends to be more effective when the level of elaboration is low (Maheswaran & Meyers-Levy, 1990; Rothman, Salovey, Antone, Keough, & Martin, 1993). As a consequence, positively framed alcohol messages in movies, such as having fun while drinking beer at a party or drinking wine during dinner (low levels of elaboration), are likely to have a positive effect on the viewers.

To explore the contents of alcohol portrayals, this study investigated the framing of alcohol based on (i) product placement strategies (including modality of presentation, level of plot connection and valence); (ii) law compliance and (iii) general characteristics of the alcohol portrayal.

### Product placement strategies

Three types of general product placement strategies can be distinguished: modality of presentation, level of plot connection and valence (Gupta & Lord, 1998; Law & Braun, 2000; Russell, 2002). In the following section, the three product placement strategies will be discussed in greater detail.

#### *Modality of presentation*

Modality of presentation refers to whether the placement is auditory, visual or a combination of auditory and visual (Gupta & Lord, 1998; Russell, 2002). Firstly, visual placement occurs when the product or brand is only shown, with no relevant message or other auditory material that refers to the brand or product; this type of placement is also called a screen placement. Secondly, auditory or verbal placement occurs when a character mentions the brand name or any other brand-related message without visually showing the product; this is also called script placement. Lastly, the combination of auditory and visual placement occurs when the product or brand is visible and at the same time the brand or a

brand-related message is mentioned. These modalities can have varying degrees or types of use, for example, the number of times a brand is mentioned, the number of visual appearances or the camera style used (Russell, 2002).

#### *Level of plot connection*

In addition to the modality of a portrayal, the level of plot connectedness impacts the effectiveness of the placement. The level of plot connection refers to the degree to which the brand is integrated into the plot of the story (Russell, 2002) and how meaningful the product is to the overall message or story (Russell & Russell, 2009). Lower plot portrayals, for example, do not add much value to the story. In contrast, higher plot portrayals represent an important thematic element. A placement that is highly connected to the plot has a notable place in the story line, for example, when a character is clearly identified with the brand. The level of plot connection also refers to the prominence of the portrayal within a movie (Gupta & Lord, 1998). Prominent placements are those in which the product is central to the action in the scene or is highly visible because of the size of the placement or its position on the screen. Portrayals in which the product or brand is not shown prominently are referred to as subtle placements.

#### *Valence*

The valence of product placement refers to the positive or negative context in which the product is placed or the attitudes that characters show toward the product. Russell and Russell (2009) showed that when alcohol portrayals appear visually in the background, they most often project messages that associate alcohol with positive outcomes, such as having a good time at a party. However, when alcohol portrayals are more central to the plot, they are associated with negative outcomes, such as crime or addiction. Furthermore, positive messages tend to appear more visually, and negative messages are more related to verbal discussions. In addition to the occurrence of alcohol portrayals, research has examined the influence of positive and negative product placements more generally. Morton and Friedman (2002) studied the relationship between product placement beliefs and product usage behaviours. Their findings showed that negative placements in movies can ensure that consumers will not use the product anymore, while positive placements can contribute to consumers’ use of the product. Furthermore, the attitudes (positive or negative) of a character towards a product influence the attitudes of consumers (Russell & Stern, 2006). However, this depends on the character’s association with the product. For example, when a character had a negative attitude toward a product, consumers’ attitudes were only changed when the character was strongly associated with the product. Thus, the valence of a portrayal is important to the attitude toward the product that the consumers perceive. Positive portrayals lead to positive attitudes and usage, while negative portrayals encourage negative attitudes toward and usage of the portrayed product. For example, when alcohol use is portrayed in a positive way or has positive effects, viewers will consider alcohol use a positive behaviour.

### Compliance with legislation and guidelines

Because the negative consequences of alcohol advertising and alcohol portrayals are known, there are European guidelines (EUR-Lex, 2010) defining the criteria for advertising alcoholic beverages and teleshopping for the alcohol industry. Audiovisual media services provided across frontiers by means of various technologies are one of the ways of pursuing the objectives of the European Union. However, the audiovisual sector has to safeguard certain public interests as well and therefore specific guidelines were drawn up that ensure that broadcasts do not include any programmes which might seriously impair the physical, mental or moral development of the public, especially minors. Regarding the alcohol-specific guidelines, these criteria include:

- (1) Advertising must not be aimed specifically at minors and may not show minors consuming alcoholic beverages;
- (2) The consumption of alcohol may not be linked to enhanced physical performance or driving;
- (3) Advertisements should not give the impression that alcohol contributes to social or sexual success;
- (4) Advertisements cannot claim that alcohol has therapeutic qualities or that it has stimulating, calming or stress-reducing effects;
- (5) Advertisements shall not encourage immoderate consumption of alcohol, and abstinence or moderate consumption cannot be shown in a negative light;
- (6) Advertisers are not allowed to emphasise a product's alcohol level as a positive attribute. In the Netherlands, Dutch media law sets strict regulations for advertising alcoholic beverages. For example, advertisements and in-context sponsorship for alcoholic beverages are only allowed on television between 9:00 p.m. and 6:00 a.m. (Overheid.nl, 2008).

### Alcohol portrayal characteristics

The characteristics of an alcohol portrayal give a general overview of the message of the portrayal. Firstly, alcohol in movies can take various forms, including no consumption (i.e. a bottle of liquor behind the bar), active alcohol consumption (i.e. a character is actually drinking an alcoholic beverage) or passive alcohol consumption (i.e. a character is holding an alcoholic beverage, and alcohol consumption is implied). Research shows that in an American television series, alcoholic beverages were consumed actively and passively almost equally (Van den Bulck, Simons, & Van Gorp, 2008). Furthermore, several types of alcoholic beverages that are visible in movies can be distinguished. A distinction can be made based on alcohol level (Jellinek, 2011). Beer, for example, contains 5% alcohol, and wine contains 12%. The research of Van Hoof, De Jong, Fennis, and Gosselt (2009) shows that wine is the most popular drink in one popular Dutch soap series. Another aspect of the characteristics of alcohol portrayal is the context of the portrayal, including time of the day and location of the portrayal and the character's age and gender. For instance, a content analysis by Van den Bulck et al. (2008) showed that the location where most alcohol was consumed was at a home. Furthermore, alcohol was consumed mostly in the evening.

### Method

To investigate the prevalence and framing of alcohol portrayals in Dutch movies, a content analysis was conducted to analyse both sponsored and non-sponsored Dutch movies released between 2010 and 2014. Content analysis research provides a "scientific, objective, systematic, quantitative and generalisable description of communication content" (Kassarjian, 1977; p. 10).

### Sample

Selecting the movies for the content analysis involved three stages. Firstly, for each year (from 2010 to 2014), the 20 most popular Dutch movies were identified based on the number of cinema visitors (NVB and NVF, 2010–2014). Some of the movies were in the Top 20 most popular cinema movies for two years, resulting in a total of 90 Top 20 movies. For all of these movies, the title, year of release, number of viewers, ranking, content warning labels and genre were collected. Secondly, the sponsored movies were selected. Dutch law obliges sponsored movies to include the tagline "This movie was made possible by" or "This movie was sponsored by" at the beginning and end of the movie. Based on this, of 90 identified movies, eight appeared to be sponsored by an alcohol brand. Thirdly, from the remaining 82 movies, eight comparable non-sponsored movies were selected. This control group was selected according to the genre and the assigned media rating content warning labels, including both the age-based ratings (all ages, 6 years of age, 12 years of age and 16 years of age) and the content-based ratings (violence, fear, sexual content, discrimination, the use of drugs and bad language). The warning labels were used as to select non-sponsored movies that were comparable to the sponsored movies and the eight non-sponsored movies that were ultimately selected are the ones that best met all three criteria: year of appearance, assigned media rating and genre. For each selected sponsored movie, there was only one best comparable non-sponsored movie. See Table 1 for the study sample, including the selection criteria.

### Coding scheme

A coding scheme was developed that focussed on three main framing strategies and various aspects of the alcohol portrayals. Every portrayal was coded separately, except for portrayals in which a number of people are drinking alcohol in the background of a specific scene (e.g. a party at a bar). Firstly, the characteristics of the portrayal were coded: drinking location, time of day, and gender and age of the character (Table 2). Secondly, whether the brand of the product was visible was coded; if yes, the brand was coded (Table 3). Thirdly, the product placement strategies were coded (Table 4). Finally, whether the alcohol portrayal was in compliance with the law was coded (Table 5).

### Analyses and inter-coder reliability

Firstly, all of the movies were viewed without coding alcohol portrayals to understand the storyline. Then, all of the movies were watched a second time, and all alcohol portrayals were mapped. Finally, all the mapped portrayals were watched

Table 1. Sample: eight Dutch movies sponsored by an alcohol brand and eight non-sponsored movies.

Movie title	Year	Sponsor	Age and warning label	Genre
Verliefd op Ibiza	2013	Licor 43	12 - anxiety/sex/bad language/drugs and/or alcohol abuse	Romance/entertainment/comedy
Toscaanse bruiloft	2014	Non-sponsored	12 - violence/bad language/drugs and/or alcohol abuse	Romance/comedy
Soof	2013	Tia Maria	12 - sex/bad language	Romance/comedy
Alles is familie	2012	Non-sponsored	12 - bad language/drugs and/or alcohol abuse	Drama/romance/entertainment/comedy
Mannenhart	2013	Disaronno	9 - anxiety/bad language	Drama/romance/comedy
Gooische vrouwen	2011	Non-sponsored	9 - anxiety/bad language	Drama/romance/comedy
Komt een vrouw bij de dokter	2009	Jameson	12 - anxiety/sex/bad language	Drama
De gelukkige huisvrouw	2010	Non-sponsored	12 - anxiety/sex/bad language	Drama
Hartenstraat	2014	Jameson	12 - sex/bad language	Romance/comedy
Smoorverliefd	2013	Non-sponsored	12 - sex/bad language	Drama/romance/comedy
De verbouwing	2012	Bockor	12 - anxiety/sex/bad language/drugs and/or alcohol abuse	Thriller
Loft	2010	Non-sponsored	12 - violence/anxiety/sex/bad language/drugs and/or alcohol abuse	Romance/thriller
All stars 2: Old stars	2011	Amstel	12 - anxiety/sex/bad language/discrimination	Humor/entertainment
Alleen maar nette mensen	2012	Non-sponsored	12 - violence/sex/bad language/discrimination	Comedy
De eetclub	2010	Licor 43	12 - violence/anxiety/sex/bad language	Thriller
Daglicht	2013	Non-sponsored	12 - violence/anxiety/sex/bad language	Drama/thriller

again and coded using the code scheme. A second, independent researcher coded ~17% of all portrayals (two of the sixteen movies), which included 158 of the total number of 937 portrayals. Inter-coder reliability ranged from 0.73 to 1.00 (Cohen's kappa) and was considered satisfactory (Tables 2–5).

## Results

The results section consists of three parts: general portrayal characteristics, product placement strategies and compliance with legislation and guidelines. For each part, the total results, the results for sponsored movies, the results for non-sponsored movies, and the differences between these two groups are presented. To investigate the potential differences between sponsored and non-sponsored movies, Chi-square tests were used.

### Portrayal characteristics

Table 6 shows the portrayal characteristics. This part consists of 10 variables, including alcohol consumption and the context of the portrayal (including the age and gender of the drinker, the number of drinkers, the product category, the drinking location, time of the day and background characters consuming alcohol).

#### Alcohol consumption

In total, 937 alcohol portrayals were depicted (an average of 59 alcohol portrayals per movie) in the 16 movies, and every movie contained alcohol portrayals. In 251 of the portrayals, alcohol was consumed actively (27%); in 454 portrayals, alcohol was consumed passively (49%), and there was no consumption of alcohol in 25% of the portrayals (in those cases, the alcohol was just shown; for example, a bottle of liquor behind the bar or a picture with an alcohol brand logo on the wall).

A comparison of the movies sponsored by an alcohol brand and those that were not sponsored by an alcohol brand revealed a significant difference in alcohol consumption: ( $N=937$ ) (Chi-square = 7.62,  $df=1$ ,  $p=0.022$ ). The movies that were sponsored by an alcohol brand included more portrayals in which alcohol was only visually present (28%) compared with the movies that were not sponsored (21%). Furthermore, the movies that were sponsored contained fewer portrayals of passive alcohol consumption (45%) compared with the non-sponsored movies (53%).

#### Context of the portrayal

The context of the portrayal was measured using the following variables: age, gender, time of the day and location of the portrayal (Table 5). There was a significant difference between the variables age, location and time of the day in the sponsored versus non-sponsored movies.

The age of the character who consumed alcohol was most often between 18 and 50 years (83%). In 1% of the portrayals, a person younger than 18 years old consumed alcohol. Comparing the sponsored movies with the non-sponsored movies, in the alcohol-sponsored movies, the characters who consumed alcohol were more often in the age category 36–50 years (52%) compared with the non-sponsored movies (36%) ( $N=937$ ) (Chi-square = 47.95,  $df=3$ ,  $p<0.001$ ). In movies that were sponsored, fewer drinkers were aged  $\geq 50$  years (8%) compared with the non-sponsored movies (15%).

Most of the alcohol portrayals took place in a commercial setting (31%), and half of the placements were set in a home environment: at the home of others (28%) or the character's own home (22%). In the non-sponsored movies, the portrayals more often took place at someone else's house (35%) compared with the movies that were sponsored by an alcohol brand (22%;  $N=937$ ) (Chi-square = 25.97,  $df=3$ ,  $p<0.001$ ). In the sponsored movies, most portrayals took place in a

Table 2. Coding scheme and Kappa for portrayal characteristics, including alcohol consumption, group size, product category, age, gender, location, time, décor and background characters.

Code	Sub code	Description/example	Kappa
Alcohol consumption	No consumption	There is no consumption, or other references to alcohol	0.86
	Passive consumption	Character is holding an alcoholic drink but is not actually consuming it	
Group size	Active consumption	Character is actually consuming alcohol	0.86
	Not applicable	There is no alcohol consumption or it concerns a background portrayal	
	1 person	The character is drinking alone, no other characters are directly involved in the scene	
	2 persons	Two characters are directly involved in the scene; they do not necessarily both consume alcohol	
	3–5 persons	Three to five characters are directly involved in the scene; they do not necessarily all consume alcohol	
	6–9 persons	Six to nine characters are directly involved in the scene; they do not necessarily all consume alcohol	
Product category	>10 persons	More than ten characters are directly involved in the scene; they do not necessarily all consume alcohol	0.91
	Beer	Beer cans, bottles, glasses	
	Wine	Wine bottles, glasses	
	Port/sherry/vermouth		
	Liquor	Vodka, rum, whisky, liquor, liquor glasses and bottles	
	Cocktails and mixed drinks	Cocktail glasses	
	Champagne/prosecco/sparkling wine	Flûte, champagne bottles	
Other alcoholic drinks	Other alcoholic drinks or when several drinks are visible in the background		
Age	Not applicable	There is no alcohol consumption or it concerns a background portrayal	0.85
	Younger than 18 years		
	Between 18 and 35 years		
	Between 36 and 50 years		
Gender	Older than 50 years		0.85
	Not applicable	There is no alcohol consumption or it concerns a background portrayal	
Location	Man		0.89
	Woman		
	At home	In the kitchen, garden, living room, bathroom, bedroom, etc.	
	Someone else's home	At family/friends/neighbors/acquaintances' kitchen, garden, living room, bathroom, bedroom, etc.	
	Work/school environment	Office, school	
	Sports club	Football field, tennis court, golf court, sports canteen	
	Commercial place	Restaurant, pub, nightclub, lunchroom, terrace	
	Festival	Organised party in the open	
	Car	In, near and around the car	
	Public space	Bus shelter, park, shopping centre, station	
	Holiday address	Camping, bungalow park, hotel	
	Supermarket	Supermarket	
	Other	Boat, crematorium, store, aeroplane	
	Time	Morning (5.00 a.m.–11.00 a.m.)	
Probably in the morning (5.00 a.m.–11.00 a.m.)			
Afternoon (11.00 a.m.–5.00 p.m.)		During lunch	
Probably in the afternoon (11.00 a.m.–5.00 p.m.)			
Evening (5.00 p.m.–11.00 p.m.)		During dinner	
Probably in the evening (5.00 p.m.–11.00 p.m.)			
Night (11.00 p.m.–5.00 a.m.)		During nightlife	
Probably in the night (11.00 p.m.–5.00 a.m.)			
Unknown		The time of the day cannot be determined	
Decor	No	There are no alcohol-related attributes visible in the decor, such as bottles behind the bar	0.85
	Yes	There are alcohol-related attributes visible in the decor, such as bottles behind the bar	
Visibility portrayal	Not visible	There is no alcohol portrayal visible, e.g. only audible	0.80
	Visible on background	The alcohol portrayal is not clearly visible, e.g. background characters are drinking wine	
	Visible on foreground	The alcohol portrayal is clearly visible, e.g. main characters are drinking wine	
Background characters consuming alcohol	No	There are no background characters (not part of the storyline) who consume alcohol	0.91
	Yes	There are background characters (not part of the storyline) who consume alcohol	

Table 3. Coding scheme and Kappa for brand visibility and brand that is visible.

	Description/example	Kappa
Brand visibility		
Not visible	The brand of the product is not visible	0.82
Visible	The brand of the product is visible	
Brand that is visible		
Open question	Only when a brand is visible	1.00

commercial environment such as a pub or restaurant (33%), compared with 28% of the portrayals in the non-sponsored movies.

More than half (52%) of the alcohol portrayals took place in the evening, and almost 39% of the portrayals took place before 5 p.m.; 33% took place in the afternoon, and 6% took place in the morning. Regarding the differences between the two types of movies, in the sponsored movies, alcohol portrayals took place more often (36%) in the afternoon ( $N = 937$ ) (Chi-square = 11.36,  $df = 3$ ,  $p = 0.023$ ) than in the

Table 4. Coding scheme and Kappa for product placement strategies, including modality, valence and plot connection.

	Description/example	Kappa
Modality		
Audio	Somebody is talking about alcohol	0.97
Visual	The alcohol portrayal is visible	
Audio-visual	Combination of audio and visual, somebody is talking about alcohol and the alcohol is visible	
Valence		
Not applicable	There is no alcohol consumption or it concerns a background portrayal	0.82
Positive	For example, to celebrate something; when the consumption of alcohol is associated with fun, humour and friendship	
Negative	For example, to drown sadness, when the character is drunk, negative consequences like violence or in combination with drugs	
Plot integration		
Yes	Without the alcohol portrayal the story would be different, e.g. alcohol consumption on a party	0.85
Somehow	The alcohol portrayal has somehow added value for the story, e.g. when the character is drinking wine during dinner	
No	The alcohol portrayal has no added value for the story; it could be replaced by a non-alcoholic drink	

Table 5. Coding scheme and Kappa for law compliance, including six criteria for advertising for alcoholic beverages.

	Description/example	Kappa
Alcohol consumption by minors (<18 years)		
Yes	The character who is consuming alcohol is younger than 18 years.	1.00
No	The character is older than 18 years.	
Alcohol consumption results in better physical performance or driving behaviour		
Yes	Alcohol consumption does clearly result in better physical performance or driving behaviour.	1.00
Somehow	Alcohol consumption does somehow result in better physical performance or driving behaviour.	
No	Alcohol consumption does not result in better physical performance or driving behaviour.	
Alcohol consumption induces social or sexual success		
Yes	Alcohol consumption clearly induces social or sexual success, e.g. a belly shot	0.91
Somehow	Alcohol consumption somehow induces social or sexual success, e.g. a “gold-digger”, drinking champagne to show social or sexual success or taking champagne to have success on a date.	
No	Alcohol consumption does not induce social or sexual success.	
Alcohol as a therapeutic drug, to calm or to reduce stress		
Yes	Alcohol consumption is clearly used as a therapeutic drug; to calm or to reduce stress, e.g. when someone is drinking a glass of liquor in one time because he/she is sad.	1.00
Somehow	Alcohol consumption is somehow used as a therapeutic drug, to calm or to reduce stress, e.g. when someone orders alcohol when she/he has some personal issues.	
No	Alcohol consumption is not used as a therapeutic drug, to calm or to reduce stress.	
Excessive alcohol consumption is encouraged or abstinence is discouraged		
Yes	Excessive alcohol consumption is clearly encouraged or abstinence is discouraged, e.g. when someone encourages a person to drink alcohol mixed with drugs without knowing or encouraging minors to consume alcohol.	0.75
Somehow	Excessive alcohol consumption is somehow encouraged or abstinence is discouraged, e.g. when someone is refilling a glass without asking.	
No	Excessive alcohol consumption is not encouraged or abstinence is not discouraged.	
Emphasis is placed on the level of alcohol		
Yes	Emphasis is clearly placed on the level of alcohol.	1.00
Somehow	Emphasis is somehow placed on the level of alcohol.	
No	Emphasis is not placed on the level of alcohol.	

Table 6. Results of portrayal characteristics (sponsored movies versus non-sponsored).

	Total N (%)	Sponsored N (%)	Non-sponsored N (%)	$\chi^2$	p Value
Total	937 (100)	509 (54)	428 (46)		
Alcohol consumption				7.62	0.022
No consumption	232 (25)	142 (28)	90 (21)		
Passive consumption	454 (49)	228 (45)	226 (53)		
Active consumption	251 (27)	139 (27)	112 (26)		
Total	937 (100)	509 (100)	428 (100)		
Group size				31.91	0.000
1 person	25 (4)	16 (5)	9 (3)		
2 persons	147 (24)	99 (31)	48 (17)		
3–5 persons	214 (35)	93 (29)	121 (42)		
6–9 persons	172 (27)	95 (29)	77 (27)		
>10 persons	49 (8)	16 (5)	33 (11)		
Not applicable <sup>a</sup>	330	190	140		
Total	937 (100)	509 (100)	428 (100)		
Product category				17.74	0.001
Beer	111 (12)	62 (12)	49 (11)		
Wine	321 (34)	168 (33)	153 (36)		
Liquor	100 (11)	73 (14)	27 (6)		
Champagne	248 (27)	121 (24)	127 (30)		
Other <sup>b</sup>	157 (17)	85 (17)	72 (17)		
Total	937 (100)	509 (100)	428 (100)		
Age				40.26	0.000
Younger than 18 years	6 (1)	6 (2)	0 (0)		
Between 18 and 35 years	238 (39)	122 (38)	116 (40)		
Between 36 and 50 years	273 (45)	167 (52)	106 (37)		
Older than 50 years	90 (15)	24 (8)	66 (23)		
Not applicable <sup>a</sup>	330	190	140		
Total	937 (100)	509 (100)	428 (100)		
Gender				397	0.138
Men	356 (59)	179 (56)	177 (61)		
Women	251 (41)	140 (44)	111 (39)		
Not applicable <sup>a</sup>	330	190	140		
Total	937 (100)	509 (100)	428 (100)		
Location				25.97	0.000
At home	203 (22)	114 (22)	89 (21)		
Someone else's home	263 (28)	112 (22)	151 (35)		
Commercial place	286 (31)	166 (33)	120 (28)		
Holiday address	65 (7)	35 (7)	30 (7)		
Other <sup>c</sup>	120 (13)	82 (16)	38 (9)		
Total	937 (100)	509 (100)	428 (100)		
Time				11.36	0.023
Morning (5.00 a.m.–11.00 a.m.)	59 (6)	38 (8)	21 (5)		
Afternoon (11.00 a.m.–5.00 p.m.)	308 (33)	182 (36)	126 (29)		
Evening (5.00 p.m.–11.00 p.m.)	490 (52)	245 (48)	245 (57)		
Night (11.00 p.m.–5.00 a.m.)	60 (6)	36 (7)	24 (6)		
Unknown	20 (2)	8 (2)	12 (3)		
Total	937 (100)	509 (100)	428 (100)		
Decor				0.172	0.678
No	529 (57)	291 (57)	238 (56)		
Yes	408 (44)	218 (43)	190 (44)		
Total	937 (100)	509 (100)	428 (100)		
Background characters consuming alcohol				3.36	0.067
No	576 (62)	327 (64)	249 (58)		
Yes	361 (39)	182 (36)	179 (42)		
Total	937 (100)	509 (100)	428 (100)		

<sup>a</sup>No consumption or background placement.

<sup>b</sup>For example, port, mixed drinks and cocktails.

<sup>c</sup>For example, boat, crematorium, store and sports club.

non-sponsored movies (29%). In the non-sponsored movies, alcohol portrayals more often took place in the evening (57%) compared with sponsored movies (48%).

Overall, alcohol consumption occurred in groups of three to five people in 35% of the cases. There was a significant difference between the movies that were sponsored by an

alcohol brand and the non-sponsored movies: alcohol consumption in the sponsored movies more often involved two people who were directly involved in the scene (31%), while the portrayals in the non-sponsored movies more often took place in groups of three to five people ( $N=937$ ) (Chi-square = 31.00,  $df=4$ ,  $p<0.001$ ).



Regarding the product category, most of the portrayals depicted wine (34%) and champagne (27%). For this variable, there was a significant difference between the two groups: the movies that were sponsored by an alcohol brand often contained more liquor portrayals (14%) than the non-sponsored movies (6%) ( $N=937$ ) (Chi-square = 17.34,  $df=3$ ,  $p=0.001$ ). The movies that were not sponsored more often contained champagne (30%) compared with the sponsored movies (24%).

### Brand visibility

Table 7 shows whether a brand was visible in an alcohol portrayal and lists the most frequently portrayed brands. In 13% of all portrayals, a specific alcohol brand was visible. This applied to both the sponsored movies and the non-sponsored movies. The brands that were most visible in the selected movies were Amstel beer (18%), Moët champagne (15%), Licor 43 liquor (15%), Jupiler beer (11%) and Grolsch beer (7%). These brands, however, were not all sponsors of the selected movies.

### Product placement strategies

Table 8 shows the results for the three product placement strategies, including the modality of presentation, valence and level of plot connection.

Regarding the product placement strategies, most of the portrayals were visual (90%), were shown in a positive context (82%), were somehow integrated into the plot (40%) and were dominantly visible in the scene (68%). The two types of movies differed significantly in terms of plot integration:  $N=937$  (Chi-square = 7.37,  $df=1$ ,  $p=0.02$ ). The movies that were sponsored by an alcohol brand contained more portrayals that had no added value for the plot (39%) compared with the movies that were not sponsored (33%). The movies that were not sponsored contained more portrayals that somehow added value to the plot (45%) compared with the movies that were sponsored (36%).

### Compliance with legislation and guidelines

Table 9 shows the results regarding whether the movies adhered to the six criteria for advertising alcoholic beverages mentioned in the literature section.

The results showed that in 1% of the portrayals, a character younger than 18 years of age did consume alcohol (actively or passively). In one movie, for example, a 16-year-old teen drinks beer and vodka. Although no significant differences were found between the two types of movies, various examples of irresponsible alcohol portrayals were depicted: 4% of the alcohol consumed in the movies was intended to reduce stress; in 3% of the portrayals, excessive alcohol consumption was encouraged; and in 2% of the portrayals, the use of alcohol was related to social or sexual success.

### Discussion

The aim of this study was to analyse how alcohol is portrayed in Dutch movies and to examine the differences between movies sponsored by an alcohol brand and non-sponsored movies. In general, the differences between alcohol portrayals

Table 7. Results for brand visibility (sponsored movies versus non-sponsored).

	Total <i>N</i> (%)	Sponsored <i>N</i> (%)	Non-sponsored <i>N</i> (%)	$\chi^2$	<i>p</i> Value
Total	937 (100)	509 (54)	428 (46)		
Visibility					
Not visible	815 (87)	445 (87)	370 (86)	0.119	0.730
Visible	122 (13)	64 (13)	58 (14)		
Total	937 (100)	509 (100)	428 (100)		
Alcohol brand					
Amstel	22 (18)	22 (34)	0 (0)	78.21	0.000
Licor43	19 (15)	18 (28)	1 (2)		
Moët	19 (15)	0 (0)	19 (32)		
Jupiler	13 (11)	0 (0)	13 (22)		
Grolsch	9 (7)	0 (0)	9 (15)		
Other <sup>a</sup>	42 (34)	25 (39)	17 (29)		
Total	124 (100)	65 (100)	59 (100)		

<sup>a</sup>For example, Joseph Guy, Tia Maria, Jameson, Brand, Vedett, Bacardi and Heineken (not included in  $\chi^2$  analysis).

Table 8. Results for product placement strategies (sponsored movies versus non-sponsored).

	Total <i>N</i> (%)	Sponsored <i>N</i> (%)	Non-sponsored <i>N</i> (%)	$\chi^2$	<i>p</i> Value
Total	937 (100)	509 (54)	428 (46)	–	–
Modality					
Audio	42 (5)	27 (5)	15 (4)	3.07	0.215
Visual	847 (90)	460 (90)	387 (90)		
Audio-visual	48 (5)	22 (4)	26 (6)		
Total	937 (100)	509 (100)	428 (100)		
Valence					
Positive	515 (82)	264 (80)	251 (85)	4.36	0.113
Negative	112 (18)	66 (20)	46 (15)		
Not applicable <sup>a</sup>	310	179	131		
Total	937 (100)	509 (100)	428 (100)		
Plot integration					
Yes	222 (24)	125 (25)	97 (23)	7.37	0.025
Somehow	377 (40)	185 (36)	192 (45)		
No	338 (36)	199 (39)	139 (33)		
Total	937 (100)	509 (100)	428 (100)		
Visibility of portrayal					
Not visible	46 (5)	30 (6)	16 (4)	3.24	0.198
Visible on background	254 (27)	143 (28)	111 (26)		
Visible on foreground	637 (68)	336 (66)	301 (70)		
Total	937 (100)	509 (100)	428 (100)		

<sup>a</sup>No consumption or background placement.

in movies sponsored by an alcohol brand compared with non-sponsored movies were rather small, but this study does show that alcohol advertising and other portrayals in movies sometimes offend the legislation regarding regular alcohol commercials, and given the effects of alcohol portrayals on young viewers, this needs attention.

### Characteristics of the alcohol portrayals

Regarding the characteristics of the alcohol portrayals, sponsored movies more often depicted consumption at a commercial place (such as bar), while portrayals in non-sponsored movies more often take place at someone else's home. These differences show that alcohol use for branded content is more often framed to take place at locations where

Table 9. Results for law compliance (sponsored movies versus non-sponsored)<sup>a</sup>.

	Total N (%)	Sponsored N (%)	Non-sponsored N (%)
Total	937 (100)	509 (54)	428 (46)
Alcohol consumption by characters younger than 18 years			
No	931 (99)	503 (99)	428 (100)
Yes	6 (1)	6 (1)	0 (0)
Total	937 (100)	509 (100)	428 (100)
Alcohol consumption results in better physical performance or driving behaviour			
No	937 (100)	509 (100)	428 (100)
Total	937 (100)	509 (100)	428 (100)
Alcohol consumption induces social or sexual success			
No	915 (98)	490 (96)	425 (99)
Somehow	20 (2)	17 (3)	3 (1)
Yes	2 (0)	2 (0)	0 (0)
Total	937 (100)	509 (100)	428 (100)
Alcohol as a therapeutic drug, to calm or to reduce stress			
No	900 (96)	483 (95)	417 (97)
Somehow	26 (3)	18 (4)	8 (2)
Yes	11 (1)	8 (2)	3 (1)
Total	937 (100)	509 (100)	428 (100)
Excessive alcohol consumption is encouraged or abstinence is discouraged			
No	916 (98)	494 (97)	422 (99)
Somehow	14 (2)	9 (2)	5 (1)
Yes	7 (1)	6 (1)	1 (0)
Total	937 (100)	509 (100)	428 (100)
Emphasis is placed on the level of alcohol			
No	937 (100)	509 (100)	428 (100)
Total	937 (100)	509 (100)	428 (100)

<sup>a</sup>No significant differences between sponsored and non-sponsored movies.

people can buy and consume the product at the same time, such as in a pub or restaurant. A possible explanation is that the brand involved may want to show the viewer where the product can be bought and consumed. Furthermore, the alcohol brand that sponsored the movie also may want to set out the various ways the drink can be consumed (e.g. with food or in specific preparations). For example, in one movie, Disaronno Amaretto is explicitly mixed with prosecco. Finally, drinking in a bar or pub might be considered more common and joyful than drinking at home; this could explain why in sponsored movies, a larger share of the drinking takes place in bars, pubs and restaurants. These results are in line with earlier research. Van den Bulck et al. (2008) did not make a distinction between the character's home and someone else's home, as we did in this research. However, when instances of portrayals at both "home" locations were added together in this study, home was the most common location where alcohol consumption was portrayed.

Secondly, the sponsored movies contained more liquor portrayals than the non-sponsored movies, while the non-sponsored movies contained more champagne portrayals than the sponsored movies. Most of the sponsors in our sample were liquor brands, which can explain this finding. However, Amstel beer (a Dutch brand) was the most visible brand in the sponsored movies, followed by Licor 43. Wine was the most frequently portrayed product category. These results are in line with research by Van Hoof et al. (2009) and Van den Bulck et al. (2008), as both studies show that wine is the most

popular drink. However, this result does not correspond with actual alcohol consumption. In the Netherlands, beer is by far the most popular drink in 2014. On average, 69.9 l of beer per capita were consumed in 2014, compared with 20.3 l of wine per capita (STAP, 2014). Champagne is a popular drink in these movies; it was portrayed in 27% of the total number of portrayals. Movies and series are not a true reflection of reality because wine and champagne were the most popular drinks in television series, while in reality, beer is the most frequently consumed alcoholic beverage.

### Framing and product placement strategies

Looking at the results regarding the three product placement strategies (modality, valence and plot connection), one obvious difference between the two movie types is evident; namely, the extent to which the alcohol portrayal fits the story line (plot integration). The movies that were sponsored by an alcohol brand contained more portrayals that did not add value to the plot compared with the movies that were not sponsored, and the non-sponsored movies contained more portrayals that somehow added value to the plot. Previous research shows that the level of plot connection influences the effectiveness of the alcohol portrayal. If a portrayal is more connected to the plot, it will be better recalled (Russell & Russell, 2009), because portrayals in sponsored movies apparently have fewer added values for the plot, the portrayals are less effective. An explanation could be that in non-sponsored movies, there is no need to include alcohol consumption if it is not relevant, and therefore more relevant plot-connected alcohol consumption is present in these movies. In sponsored movies, alcohol visibility and consumption may sometimes be included more artificially, therefore resulting in a lower plot connection. In addition to plot integration, the visibility of the portrayal is important to the level of plot connection because prominent (foreground) portrayals have the highest recall and subtle portrayals have the lowest (Gupta & Lord, 1998; Law & Braun, 2000). However, for this variable, there was no significant difference between the movies sponsored by an alcohol brand and the non-sponsored movies in our study.

Regarding modality (auditory, visual or audio-visual), we found no significant difference between the sponsored and non-sponsored movies. However, studies generally show that most portrayals are visual, while earlier research (Law & Braun, 2000; Russell, 2002) shows that auditory portrayals have the greatest influence on recall. Thus, this study does not prove that sponsored movies contain more auditory portrayals.

Looking at the valence of a portrayal, positive portrayals can contribute to consumers' usage of the product (Morton & Friedman, 2002), while negative portrayals can ensure that consumers will not use the product. Furthermore, earlier research in framing shows that positive framing is likely to be more effective when the level of elaboration is low, even for products such as alcohol (Maheswaran & Meyers-Levy, 1990; Rothman et al., 1993). In general, our results showed that most portrayals were positive, leading viewers to consider alcohol as a positive thing; for example, such portrayals will lead viewers to consider it normal that alcohol is consumed at

parties or during dinner. However, there was no significant difference between the movies sponsored by an alcohol brand and the non-sponsored movies.

### Compliance with legislation and guidelines

The final part of the analyses related to the legal elements of the portrayals. The results showed that in the studied movies, in some cases underage people consumed alcohol, alcohol was related to social and sexual success, alcohol was used to reduce stress and alcohol use was encouraged. The legal domain that was not offended was that driving under the influence was not shown.

### Limitations and further research

As with every study, there are some limitations and implications for further research. Firstly, this study focussed on Dutch movies. Therefore, it is not possible to make general statements about alcohol portrayals. For further research, it would be interesting to analyse movies in other countries; because of other laws and cultural differences in other countries, differences in alcohol portrayals in movies may be expected. Secondly, there were only eight Dutch movies sponsored by an alcohol brand out of the total number of selected movies ( $N=90$ ). These movies were therefore directly included in the sample. Thirdly, in this study, we did not measure how long the alcohol portrayal was visible or how long a brand was visible. Some portrayals lasted only 1 s, while other portrayals lasted more than 30 s. For future research, we recommend measuring the duration of the alcohol portrayal to gain a deeper insight into the results. Finally, another suggestion for future research is to focus the analysis on the way viewers interpret the alcohol portrayals in a movie sponsored by an alcohol brand compared with those in a movie that is not sponsored by an alcohol brand. This study shows that there are differences in the alcohol portrayals in these movies; however, it is not known whether movie viewers notice and/or experience these differences.

### Conclusions


In conclusion, this study aimed to objectively monitor the framing of alcohol advertising and other alcohol portrayals in popular Dutch movies sponsored by an alcohol brand versus non-sponsored movies. Alcohol was present in every movie, and the portrayals were predominantly positive. In the sponsored movies, alcohol consumption most often took place in bars, more liquor was consumed, and alcohol portrayals had a lower plot connection.

### Declaration of interest

The authors report no conflict of interest and received no funding for this study.

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### References

Anderson, P., De Bruijn, A., Angus, K., Gordon, R., & Hastings, G. (2009). Impact of alcohol advertising and media exposure on

- adolescent alcohol use: A systematic review of longitudinal studies. *Alcohol and Alcoholism*, 44, 229–243. doi: 10.1093/alcalc/agn115.
- Bloxham, M. (1998). Brand affinity and television programme sponsorship. *International Journal of Advertising*, 17, 89–98.
- Buda, R., & Zhang, Y. (2000). Consumer product evaluation: The interactive effect of message framing, presentation order, and source credibility. *Journal of Product and Brand Management*, 9, 229–242. doi: 10.1108/10610420010344022.
- Cornwell, T.B., Weeks, C.S., & Roy, D.P. (2005). Sponsorship-linked marketing: Opening the black box. *Journal of Advertising*, 34, 21–42. doi: 10.1080/00913367.2005.10639194.
- d'Astous, A., & Seguin, N. (1999). Consumer reactions to product placement strategies in television sponsorship. *European Journal of Marketing*, 33, 896–910.
- Dal Cin, S., Worth, K.A., Dalton, M.A., & Sargent, J.D. (2008). Youth exposure to alcohol use and brand appearances in popular contemporary movies. *Addiction*, 103, 1925–1932. doi: 10.1111/j.1360-0443.2008.02304.x.
- Engels, R.C.M.E., Hermans, R., Van Baaren, R.B., Hollenstein, T., & Bot, S.M. (2009). Alcohol portrayal on television affects actual drinking behaviour. *Alcohol Alcohol*, 44, 244–249. doi: 10.1093/alcalc/agg003.
- EUR-Lex. (2010). *Richtlijn 2010/13/EU van het Europees Parlement en de Raad van 10 maart 2010 betreffende de coördinatie van bepaalde wettelijke en bestuursrechtelijke bepalingen in de lidstaten inzake het aanbieden van audiovisuele mediadiensten (richtlijn audiovisuele mediadiensten)*. Retrieved from: <http://eur-lex.europa.eu/legal-content/NL/ALL/?uri=CELEX:32010L0013> [last accessed 30 Jan 2015].
- Everett, S.A., Schnuth, R.L., & Tribble, J.L. (1998). Tobacco and alcohol use in top-grossing American films. *Journal of Community Health*, 23, 317–324. doi: 10.1023/A:1018727606500.
- Federal Trade Commission. (1999). *Self-regulation in the alcohol industry: A review of industry efforts to avoid promoting alcohol to underage consumers*. Washington, DC: Author.
- Gupta, P.B., & Lord, K.R. (1998). Product placement in movies: The effect of prominence and mode on audience recall. *Journal of Current Issues and Research in Advertising*, 20, 47–59. doi: 10.1080/10641734.1998.10505076.
- Hanewinkel, R., Sargent, J.D., Hunt, K., Sweeting, H., Engels, R.C.M.E., Scholte, R.H.J., & Morgenstern, M. (2014). Portrayal of alcohol consumption in movies and drinking initiation in low-risk adolescents. *Pediatrics*, 133, 973–982. doi: 10.1542/peds.2013-3880.
- Jellinek. (2011). *Soorten alcohol en prijzen*. Retrieved from: <https://www.jellinek.nl/informatie-over-alcohol-drugs/alcohol/alcohol-basisinfo/soorten-en-prijzen-alcohol/> [last accessed 20 Mar 2015].
- Kassarjian, H.H. (1977). Content analysis in consumer research. *Journal of Consumer Research*, 4, 8–18. doi: 10.1086/208674.
- Law, S., & Braun, K.A. (2000). I'll have what she's having: gauging the impact of product placements on viewers. *Psychology & Marketing*, 17, 1059–1075.
- Maheswaran, D., & Meyers-Levy, J. (1990). The influence of message framing and issue involvement. *Journal of Marketing Research*, 27, 361–367. doi: 10.2307/3172593.
- Meenaghan, T. (2001). Sponsorship and advertising: A comparison of consumer perceptions. *Psychology and Marketing*, 18, 191–215. doi: 10.1002/1520-6793.
- Morton, C.R., & Friedman, M. (2002). I saw it in the movies: Exploring the link between product placement beliefs and reported usage behavior. *Journal of Current Issues and Research in Advertising*, 24, 33–40. doi: 10.1080/10641734.
- NVB and NVF. (2010–2014). *Jaarverslag*. Retrieved from: <http://www.nvbinfoocentrum.nl/?id=2142> [last accessed 25 Feb 2015].
- Overheid.nl. (2008). *Mediawet*. Retrieved from: [http://wetten.overheid.nl/BWBR0025028/geldigheidsdatum\\_23-02-2015](http://wetten.overheid.nl/BWBR0025028/geldigheidsdatum_23-02-2015) [last accessed 23 Feb 2015].
- Overheid.nl. (2012). *Beleidsregels sponsoring commerciële media-instellingen 2012*. Retrieved from: [http://wetten.overheid.nl/BWBR0031834/Artikel7/geldigheidsdatum\\_09-03-2015](http://wetten.overheid.nl/BWBR0031834/Artikel7/geldigheidsdatum_09-03-2015) [last accessed 9 Mar 2015].
- Rothman, A.J., & Salovey, P. (1997). Shaping perceptions to motivate healthy behavior: The role of message framing. *Psychological Bulletin*, 121, 3–19. doi: 10.1037/0033-2909.121.1.3.

- Rothman, A.J., Salovey, P., Antone, C., Keough, K., & Martin, C.D. (1993). The influence of message framing on intentions to perform health behaviors. *Journal of Experimental Social Psychology, 29*, 408–433. doi: 10.1006/jesp.1993.1019.
- Russell, C.A. (2002). Investigating the effectiveness of product placements in television shows: The role of modality and plot connection congruence on brand memory and attitude. *Journal of Consumer Research, 29*, 306–318. doi: 10.1086/344432.
- Russell, C.A., & Russell, D.W. (2009). Alcohol messages in prime-time television series. *The Journal of Consumer Affairs, 43*, 108–128. doi: 10.1111/j.1745-606.2008.01129.x.
- Russell, C.A., & Stern, B. (2006). Consumers, characters, and products: A balance model of sitcom product placement effects. *Journal of Advertising, 35*, 7–21. doi: 10.2753/JOA0091-3367350101.
- STAP. (2014). *Alcohol consumptie per hoofd van de bevolking*. Retrieved from: <http://www.stap.nl/nl/home/feiten-en-cijfers.html>.
- Thorens, G., Khan, R., Khazaal, Y., & Zullino, D. (2012). World of Warcraft and alcohol: A secret love story? *Drugs: Education, Prevention and Policy, 19*, 27–31. doi: 10.3109/09687637.2011.570383.
- Van den Bulck, H., Simons, N., & Van Gorp, B. (2008). Let's drink and be merry: the framing of alcohol in the prime-time American youth series the OC. *Journal of Studies on Alcohol and Drugs, 69*, 933–940. doi: 10.15288/jsad.2008.69.933.
- Van Hoof, J.J., De Jong, M.D.T., Fennis, B.M., & Gosselt, J.F. (2009). There's alcohol in my soap: Portrayal and effects of alcohol use in a popular television series. *Health Education Research, 24*, 421–429. doi: <https://doi.org/10.1093/her/cyn037>.