

Is street art good or bad for you?

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Abstract

Economic growth is often achieved within a monolithic, grey urban environment, while allowing for decaying facades and deteriorating public spaces in old city centres. As artists provide a colourful facelift to a variety of locations and urban infrastructure, cities have learnt to channel the creative capacity of street art, originally banned under the broad term of graffiti.

The public good aspect of street art is particularly interesting in its dimensions of wide accessibility on one hand, and the ability to generate controversy on the other hand. This paper explores the case for supporting street art, even as opinion on associated forms of graffiti remains divided. We question the influence of public cultural on the wellbeing of various demographic groups, and explore the learning process involved in accepting street art as a public good. The willingness to pay towards the provision of public art is evaluated, controlling for exposure to street art in the evaluation of individual preferences. The most relevant dimensions of non-user value of public art are finally revisited in the context of street art.

In our survey of 970 people through field based interviews, culture is shown to increase wellbeing, and education remains the strongest individual characteristic linked with the appreciation of public culture. We also find that those exposed to street art are prepared to pay more towards its provision. Thereby, the link between education and individual support for street art - as a form of controversial public art - is shown to be stronger only where individuals encounter street art in person. It reflects an effort and learning process towards the consumption of novel cultural goods, but also the potential for increasing tolerance in the wider public through an ongoing exposure to street art. The perceived value of public art amongst the working age population in our sample is linked primarily to the potential of new cultural goods to drive creativity. Accepting the role of a 'creative class' to successful urban economies, public art itself should hence be seen as a promotor of local economies and wellbeing alike.

JEL codes: Z1, R1, P2

Key words: The value of culture, Public Art, Wellbeing, Novelty Consumption, Creative Economies.

1. Introduction

Recently, street art festivals proliferate around the world - from Barcelona to Dubai. To catch up with the trend we open the debate on economic implications of this evolving form of public art. We thus endeavour to assess the value of street art as an evolving form of public culture, which has been broadly overlooked to date by economists. The setting of our empirical investigation is a developing urban economy, in the city of Timisoara, Romania. The East European public space has been long dominated by an ominous grey and is peppered with decaying building facades in historical centres, while property rights and civic responsibilities remain under negotiation. A new, colourful addition of street art marks the return of the region's public space to the global market, along with the rest of the economy.

In a commercialised urban environment, street art refocuses our attention on the public space, as discussed by Visconti et al (2011). The variety of forms in which street art manifests itself, from *tagging* and *stylised writing* to elaborate forms of *urban design*, capture as well the variety of purposes promoted by those involved in street art. *Tags*, for example, are associated with an appropriation of the public space and self-promotion of those using them on city walls and infrastructure. It is easy to see how a social cost has been attached to these forms of graffiti, making street art in many instances illegal. The type of street art on which we centre our discussion here is geared towards the creation of a collective good, as might be associated with *urban design* and its focus on place beautification, accessible to all.

There are expected positive implications of such public art, for city dwellers and economic development alike. The role of a 'creative class' towards the promotion of modern urban economic development has been particularly emphasised by Florida (2012). This is also the reason why cities around the world now seek to channel the creative capacity of street artists, capitalising on the experience of creative quarters in attracting sophisticated and skilled consumers, along with creative businesses or rapidly developing housing and estate markets around 'creative districts'. (See Zukin and Braslow, 2011, or McAuliffe, 2012) It is within this framework that our research set out to explore the extent to which street art adds value to the daily lives of individuals exposed to it consciously or subconsciously in the urban environment.

Perloff's (1979) early article on the significance of culture in the urban context observes that artistry is an ever expanding concept, yet remains at the core of all culture, with its potential to promote social cohesion. It moves beyond established formats, as for example from literature and museums to TV and electronic games, or in the specific case of our analysis, it evolves into various manifestations of street art. Such public art, through its accessibility to all becomes a potent tool for enhancing the education of groups that are traditionally hard to reach, as well as being the means for urban regeneration and local economic development.

A growing academic literature seeks to elucidate what really contributes to our wellbeing, going beyond the limited economic approach of equalling increasing income levels with

increased life satisfaction (see Dolan et al, 2008 for a survey of the literature). Wheatley and Bickerton (2016) test the way in which involvement in cultural activities or the participation in artistic events impact on various dimensions of well-being, using data from the *Understanding Society* survey in the United Kingdom. As in previous studies (e.g. Ateca-Amestoy, 2014), they also find a general positive association of the involvement in artistic activities with life or leisure satisfaction. One puzzle appearing in Wheatley and Bickerton (2016) is the fact that cultural goods consumption seems to have no real impact on individuals' job satisfaction. This could be due to a strict division of individual time between work and leisure, with a resulting lack of spillover of wellbeing from leisure activities to employment.

Further research by Bryson and MacKerron (2016) manages to bridge the discontinuity between leisure and work by recording people's happiness during working hours, while they simultaneously engage in cultural activities, such as listening to music. Though work is generally associated with decreased individual happiness, the interaction of the cultural indicator with work improves the momentary wellbeing of individuals compared to a situation where they do not encounter culture while at work. For the purpose of our study we will accept that arts or culture can make a difference to our wellbeing overall. In the process, access to the arts should help improve our potential productivity, with positive effects on the local economy hosting happier individuals of working age.

Scitovsky (1976) contrasts economic versus non-economic human satisfaction, concluding that 'man wants novelty but cannot take, and gets disturbed by, too much of it.' (p. xi) Moreover, what we need is 'skilled consumers', able to distinguish quality goods, even if these are more complex and difficult to decipher at first. Yet, in spite of novelty constituting a potential barrier to the general public, initially controversial goods could be enjoyed more widely where there is ongoing exposure. Bianchi (2002) highlights this through the example of music, which becomes more enjoyable with increased exposure that stimulates consumption.

Contemporary art is primarily concerned with producing novelty and challenging the status quo, and its consumption and perceived public value can be understood in the framework of novelty consumption shown above. As such street art is a relatively new form of cultural good itself, and needs time to develop as a proper public good. Moreover, public goods can come with both positive and negative externalities, which coexist especially in controversial forms of art - including street art. Brooks (2008) investigated a case of controversial public art by evaluating public support for the New York City Brooklyn Museum of Art 'Sensation' Exhibition. City authorities initially considered to discontinue public support to the museum on the grounds of it hosting exhibits offensive to parts of the public. Yet, after a strong debate surrounding the subsidy, the decision was to continue funding based on the value attached to freedom of expression in society. In contrast, Rushton (2000) believes that there are strong arguments for a 'decency-and-respect' provision attached to the public funding of art,

allowing for the withdrawal of support where part of the public feels offended by artwork on public display.

Offense can be seen as a public cost of artistic creation. Indeed, public art has a distinctive characteristic, in that it can generate externalities which are not only unknown in magnitude as in the case of most other forms of public goods, but additionally, the sign of the externality it generates is unknown. Brooks (2008) noted in this respect that along with any positive value that we might attach to art, we need to also account for the costs of the offence or the impenetrability of new forms of art, including the conflict with minority groups that these generate. Hence, the overall value attached to art by individuals in society can be both negative and positive.

For an empirical estimation of the value of public goods, including the arts, various approaches have been previously used in the economic literature, including the contingency valuation method, assessed in more details with respect to the valuation of the environment (Arrow et al, 1993). We are following in our research various recommendations made with respect to this method and propose to assess the public willingness to pay for art drawing on an interview-based survey. This has the advantage of a high response rates, as well as the possibility to clarify the questions and the entities evaluated with the help of field researchers. Moreover, as we wish to assess the value attached to art on public display in the city, the field based interviews across different urban locations allows us to control for the direct exposure to street art versus a more general valuation of public art where the respondents do not encounter the art to be valued through direct visual exposure.

We would look to estimate individual preferences to contribute to public art through personal taxation, along the lines proposed by Throsby and Withers (1986). There is an expected variation in the way in which individuals express their willingness to pay depending on the formulation of the question on preferences to contribute. As such, alternative answers can be elicited from all survey participants with respect to their payment preferences. A first question would ask individuals how much they would like to contribute to art from their taxes, if their total tax contribution would grow by that specific amount dedicated to public art. The second option would consider a contribution through tax for the arts that leaves the total tax contribution of the individual unchanged, but implies a reallocation of contributions, from other types of public spending. The expectation is for the latter version to elicit higher level of potential payment, which might be beyond what people are realistically willing to pay if this expressed preference became binding rather than being just a hypothetical tax contribution. On the other hand, the question giving the option of a reallocation of spending might better show the strength of the preference that people have for the arts and cultural goods.

An option can be also considered in such empirical valuations of arts preferences whereas those participating in the survey are given information about the background of the spending on public goods, including current levels of spending relative to individual income. We have found this option to be particularly relevant for this study, after having trialled our survey in a

pilot study. That is in spite of the potential drawback of influencing the way in which respondents formulate their own preferences for contribution towards the arts, as noted in Throsby and Withers (1986). Moreover, by informing respondents about average income and general public spending on the arts and culture in the project run in Romania we have raised awareness about public finances in a country where accountability of public spending is low and as such might need a clearer reference framework for individual answers on taxes and their destination.

Within the next parts of this paper we will first try to tease out any relationship between the consumption of public art and individual wellbeing in the Romanian context. We then observe the value that working age individuals and 'skilled consumers' attribute to street art. For that we shall assess a public willingness to pay towards cultural goods and the motivation for doing so with particular reference to age and education. We subsequently explore the public good and externality dimensions of public art, going beyond any intrinsic, cultural value of art (see Throsby 2001 for a discussion of economic versus cultural value of the arts). As the focus here is on the economic value of public rather than private works of art a typology for valuation would follow Frey (2004) which considered the non-user value dimensions of art including: a.) the 'option value' of public art, where individuals draw a benefit from the availability of cultural goods even where they do not consume these at a specific point in time; b.) the 'bequest value' whereas cultural goods are seen to benefit future generations; c.) a 'prestige value' associated with the pride of hosting artistic goods in the local economy to which an individual belongs, d.) and the 'innovative value' linked to the capacity of artistic goods to develop creativity and critical thinking. We finally reflect on this last dimension and how it can be translated into the promotion of a 'creative economy' drawing on the public art.

2. Methodology

This paper uses an original data base, with data collected in a survey investigating the effects of exposure to public art and culture. A random sample of 970 respondents were interviewed in different streets of the city of Timisoara, over a period of about two months, between October and December. The survey followed a standard questionnaire format and answers were indicated as voluntary for all questions, with results being encoded and recorded anonymously in our database. A description of relevant variables is given in the Appendix of this paper.

The project started with a pilot study involving four field researchers, who later trained and co-ordinated eight pairs of interviewers to collect the primary data used in this research. At each time one pair of interviewers was located where street art was visible in the background, and a second pair in a nearby location, identical in all other respects except it being framed by a grey background. Interviewees were told at the outset about the researchers' interest in the valuation of publicly available art. There is however an experimental difference in the location of the interviews, which respondents are not told about, that is their direct exposure to a piece of street art.

The interviews first captured general perceptions and attitudes towards the arts and culture. Related questions sought respondents' assessment of their life satisfaction and happiness at the time of the interview, to assess any wellbeing derived from exposure to artistic work. In the later sections, respondents were asked to give an evaluation of how much they would be willing to contribute for subsidising public art and culture. The interviews ultimately focussed the willingness to pay questions on individual pieces of street art or hypothetical mural paintings.

In this last part of the interviews street art was directly revealed, to estimate public support for its specific production. Where street art was not visible in the specific location of the interview, support was sought for a hypothetical piece of mural decoration or street art. The broad locations for the interviews included the university campus, the city centre, a shopping mall and public transport stops. The aim was to include a large variety of respondents, and by interviewing people in different types of areas or at different times of the day to capture them during different activities of their daily lives.

To capture the willingness to pay towards public art through alternative forms of taxation, respondents were given a brief overview on how art and culture is funded, along with a note on public spending in Romania. The survey also framed questions on individual income with reference to the average earnings in the country at the time of the interview. (Note the exchange rate at the time at about RON 4.5/€ 1)

The information made available to those interviewed is synthesised below:

- The monthly spending per capita for arts and culture, primarily through the central government income from taxation is estimated by official statistics in Romania as 24 RON.
- The government budget in Romania is about 33% of GDP, and spending for culture amounts to about 1% of GDP.
- The annual GDP per capita in Romania amounts to 29.000 RON
- The average monthly income in Romania is estimated at 2.300 RON .

The pieces of street art used for reference were legal artwork in the city and had received some support from local authorities in their production. They were typically developed within various editions of the Fisart street art festival in Timisoara, without remuneration to the artists. Fisart has focussed on a variety of derelict, industrial or grey public and private sites in the city, to be brightened up by local and international street artists. The festival is co-ordinated and curated by a professional artist of the University of Timisoara's Faculty of Arts and Design.

The next section looks into some descriptive statistics and specific characteristics of respondents in our sample, before considering the results of our analysis framed around the evaluation of street art and its contribution to the promotion of a 'creative city'.

3. Sample data

The variables used in this analysis and the way in which we have quantified alternative measures of the willingness to pay are discussed in the Appendix. We first summarise the frequency of demographic and socio-economic characteristics within the sample, including an overview of the direct exposure to street art that we have sought to record.

Table 1 Sample characteristics

		Frequency	Percent
Street Art Exposure	no	430	44.3
	yes	540	55.7
Gender	female	519	53.5
	male	451	46.5
Attended Cultural Events during last year	Yes	353	36.4
	No	617	63.6
Gross Monthly Income	0-499 RON	215	22.2
	500-999 RON	210	21.6
	1000-2299 RON	283	29.2
	2300-3999 RON	180	18.6
	over 4000 RON	67	6.9

Table 2 Descriptive statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Overall Happiness	968	3	10	7.85	1.257
Well-being at time of interview	970	1	10	7.66	1.642
Contribution of public space to well-being	965	1	10	8.97	1.542
Age	958	15	77	31.70	13.721
Years of Study	930	5	32	14.48	2.920
Number of Children	967	0	5	.54	.885
Monthly willingness to pay for art	969	.00	1000.00	39.8483	66.55485

Willingness to pay if arts quota changes	968	.00	2400.00	58.2335	129.90782

In our sample there is a slightly higher representation of those exposed directly to street art than those without a mural decoration in the background. That is part of the experimental design rather than a general fact in the urban environment. We have intended to undertake interviews in alternative locations with otherwise similar characteristics over the same period of time. That should allow us to observe the variation of people’s preferences for public art with direct exposure to it, all else being equal. There might appear a slight bias in the inclination to respond to our survey by those approached for interviews, as they are happier to talk about art and culture in the presence of street art. That gives us a higher number of respondents with mural artwork in the background; yet we still have a good balance of answers recorded in both types of location, including 430 responses without visible street art. The sample has as well a somewhat higher number of female than male respondents, with a 53.5 to 46.5 split. The reported income levels cluster around the median earnings in Romania, but we also have a relatively higher incidence of income levels reported as under the median. This could be due to a larger number of interviews being recorded around the university campus hosting prominent street art, and with students generally relying on money from parents or part-time jobs. However, research teams have endeavoured to include a variety of demographic groups, and the sample covered a good range of occupations. Though we have not reported here specific occupational statistics, some of our alternative estimations tried to control for the student status of respondents, with no significant differences in results.

One observation to further note in table 1 is that the variable on attendance of public cultural activities shows that well under half of our respondents (i.e. 36.4%) have participated in any such activities over the preceding year. Generally, participation in arts and culture is low in Romania compared to other European countries. This is often linked to accessibility of cultural objectives and events in the local area, rather than to the affordability of artistic events expected to act as a barrier to consumption in a country with relatively low income levels. (European Commission, 2013).¹

¹ Since our survey took place, the city of Timisoara has entered the competition for European Cultural Capital in 2021, enhancing access to various forms of public culture.

In table 2 descriptive statistics also show that the reported life satisfaction at the time of the interviews is much in line with general levels of happiness observed in more advanced European economies. The average recorded for personal satisfaction in the sample is over 7.5 on a scale from 1 to 10, where 1 is the lowest and 10 the highest level of momentary happiness. This relatively high level of wellbeing has been further recorded in the survey under a more generic question, on overall happiness. As such, the lower income potential of the population in Romania seems to have relatively little impact on the ability to enjoy life, as often linked with the inclination of consuming artistic goods. Finally, it emerges in this survey that people consider their general wellbeing to be strongly influenced by the quality of the urban environment, rating the significance of the public space for individual wellbeing at an average of 8.97. This indicator has been once again measured on a scale from 1 to 10, with 10 representing the highest possible importance attached to the urban space.

The demographic indicators that we note here are the average years of education in our sample, which are rather high at 14.48 years, while respondents have on average less than one child. The latter might reflect the low birth rate and declining population trend of Romania during transition, but both indicators are again consistent with a relatively high number of students in the sample.

Finally, we note here the relatively higher willingness to pay towards the arts and culture in our sample than the presented RON 24 cited from public statistics - which is not unusual in contingent valuation studies. What remains still of interest is how the preference for contribution is affected by a rephrasing of the questions. As such, people are happy to pay on average a RON 39.84, above the current status quo, where they are faced with a (though of course, still hypothetical) possibility to have their taxes raised, and a considerably higher RON 58.23 where their total contributions would be kept constant, with a proportional reallocation of public spending towards culture.

4. Some evidence on the contribution of public arts and culture to wellbeing.

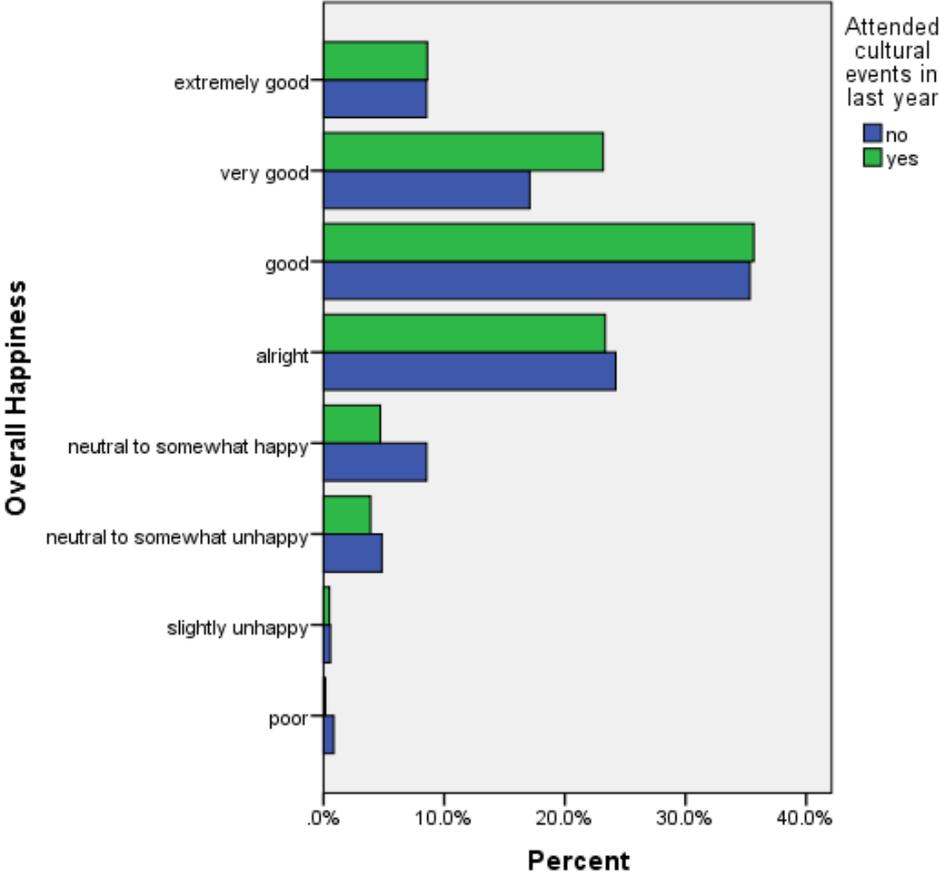
This section phrases the significance of arts and culture in terms of its contribution to individual wellbeing, before going into a more standard approach on the valuation of public art with respect to a quantified willingness to pay. As such, we have asked our respondents to provide an overview of their general level of happiness which we have linked below to their stated participation and consumption of publicly subsidised culture. Figure 1 indicates a normal distribution of the level of happiness in the population, but with a stronger inclination for those noting their wellbeing to be good, very good or extremely good where they were

involved in cultural activities over the previous year. While there is no clear indication here of whether general wellbeing influences an appreciation of culture, or rather that the arts and culture have the potential to raise general wellbeing, there remains a clear positive association between the two indicators in our sample - as in most earlier research discussed on culture and happiness.

Based on the t-test for the mean value of well-being for those who attended cultural activities (mean 7.72) versus those who have not been involved in these over the preceding year (mean 7.93) we get a statistically significant difference at 1% level between the two groups. When we replicate the same test using the variable on momentary life satisfaction rather than general happiness, there is a much smaller difference for those exposed to cultural activities over the previous year and statistically significant only at 10% level.

We also tested the difference in happiness for those encountering street art against those who are not exposed to it, and there is no statistical difference between the two groups. This gives some support to the proposition that happier individuals enjoy the arts, rather than the other way around, with a one-off visualisation of art as a public good making little difference to wellbeing. The observation also supports the idea of a 'skilled consumption' being involved in the arts, needing a more sustained and conscious exposure, especially with reference to novelty or even controversial public goods of which street art is an example. In fact, in the initial stages of our interviews when their own wellbeing was estimated by respondents, we did not yet point out to them the works of street art, otherwise obvious (or not) in the background. To bring such work into the consciousness of our respondents, we have designed the willingness to pay questions to explicitly refer to the public work of art as well. The valuation of public art and culture in this framework will be attempted in this framework by the discussion in the next section.

Figure 1. General happiness and the consumption of public culture



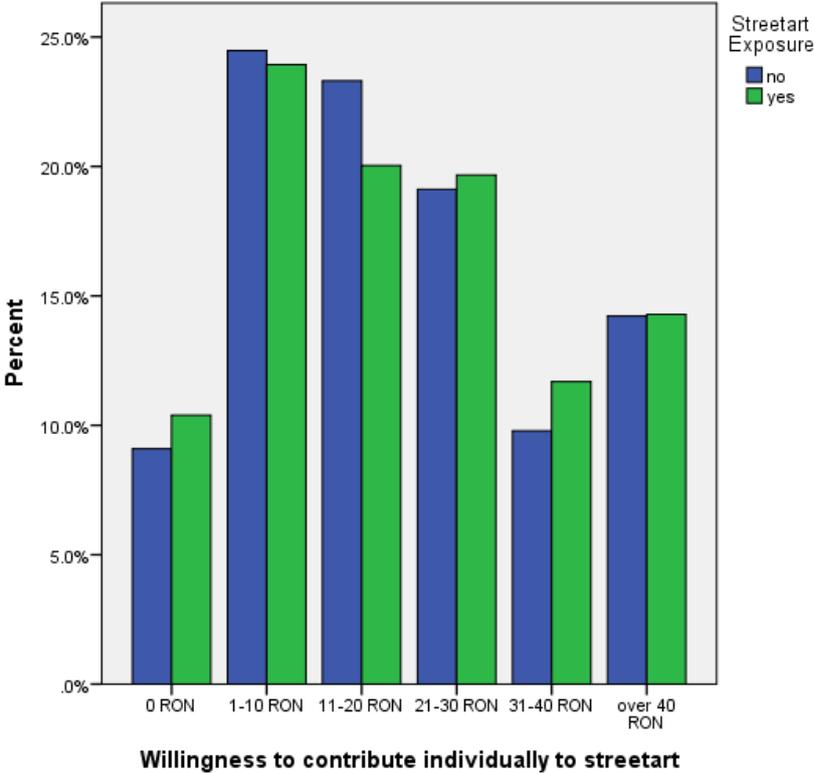
5. Evidence towards the public evaluation of street art

5.1 Willingness to pay for street art

To start with, Figure 2 records the incidence of various amounts that people stated as their preference for individual contributions towards specific work of street art, whereas this was either visible or just hypothetical.

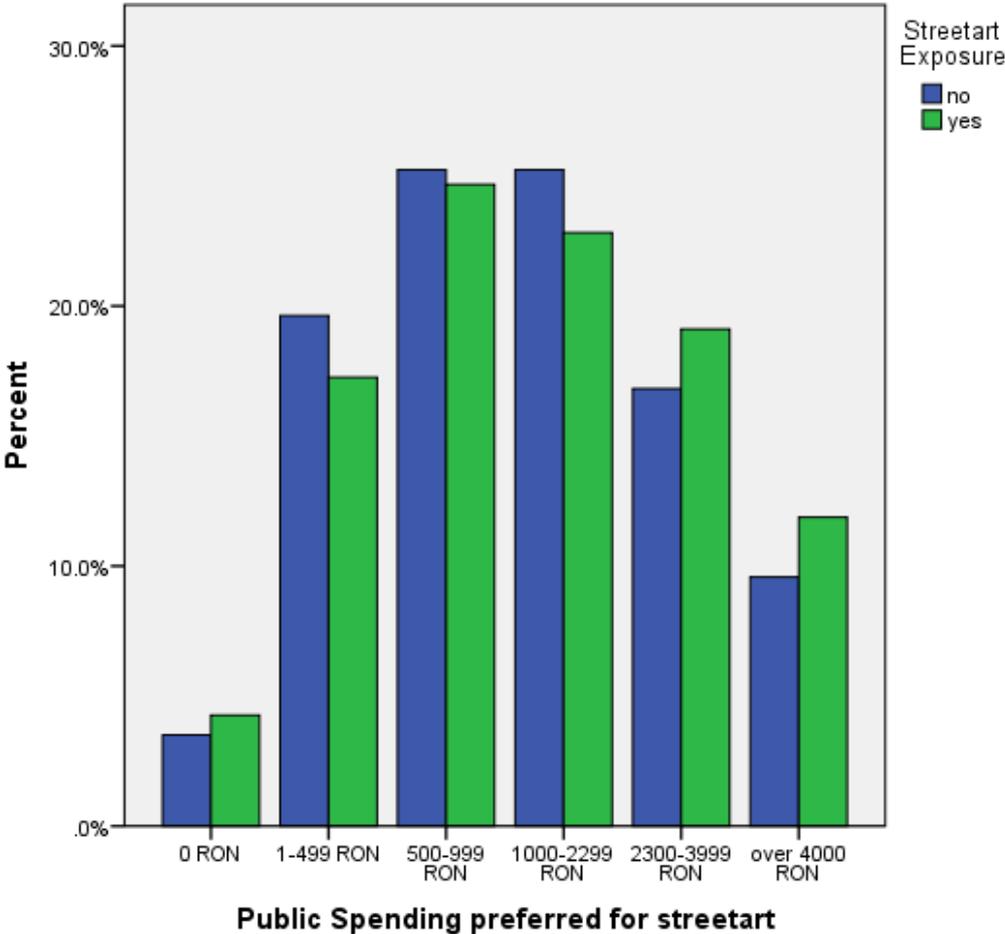
As people have been shown to change their preferences when they reflect on the value of a public good as directly linked to their own contribution or more generally from public funds, we have reiterated the question asking respondents how much authorities should pay towards a piece of public art. Having been given six options for their own contribution, through taxation, individuals tended to prefer the slightly lower amounts. What is interesting however in this case is the fact that very few respondents (about 10%) considered that no contribution should be made towards street art. While the willingness to pay setting did not allow for a negative value to be attached by the public to potentially controversial street art, we can consider that those preferring a zero contribution would possibly dislike such artwork and in fact attach a negative value to individual murals as well.

Figure 2 Preference for individual support to street art



Beyond this observation, a disassociation appears between individual contributions and public contributions preferred towards street art. Figure 3 records the willingness to pay indirectly, through government spending, showing perhaps the more general preference for artistic goods, beyond what is usually captured in the price to be paid by the individual. As such, we note the estimated value of public spending towards a piece of street art, with answers being more normally distributed and with a median around the same value as median income. People might hence perceive that artists should be paid towards their public art work a fair amount, comparable to other earnings in the economy of reference. Yet, the preference is for such payments to originate from some abstract public entity rather than linking this value with their own contributions to the public good.

Figure 3 Preference for public support to street art



What is also interesting in this estimation is that the frequency of responses indicating a zero support or perhaps a negative value of controversial street art has declined even further, to less than 5% of all respondents. Instead, many more in our sample prefer to pay more than the value of average monthly earnings towards the work of street artist, albeit, from public funds.

5.2 Estimating differences in Public Support for Art, depending on exposure to Street Art.

Below we report some further statistics on the more general appreciation of art and culture, as revealed through the willingness to pay differentiated by whether are exposed in the background to street art of not. The average amount to be paid is considerably higher for those who had the work of public artists in their visual area, compared to respondents in a neutral location, even in circumstances where individual wellbeing seemed not to have been influenced by the display of artwork. This difference is statistically significant at under 5%,

providing strong evidence that the economic value attached to art and culture is significantly higher where people are directly exposed to public art, and independent on their mood or general level of happiness. Our results are summarised in table 3 below.

Table 3 Mean willingness to pay for public culture

	<i>Number of respondents</i>	<i>Monthly willingness to pay for art in RON</i>
Not directly exposed to street art	430	35.13 RON
Exposed directly to street art	539	43.61 RON

The p-value for the t-test of the difference in the two means is just below 0.049, supporting our conclusion that those exposed to public art are willing to contribute more tax towards culture.

5.3 The value of arts and culture based on demographics

We are looking next at the overall support in the population for cultural activities, differentiating by whether individuals attended public cultural events over the previous year. We considered at first demographic variables alone, to get an overall picture on engagement with the arts by various categories as given by the variables reported in table 4. We make a distinction between natives of the city in which the survey is implemented, and those born outside of the local area of reference. The involvement in cultural events (including the attendance of concerts, galleries, exhibitions, etc.) can inform our understanding of the predominant characteristics of the beneficiaries of public arts events, and whether these are locally consumed or rather make a city potentially more attractive through the promotion of public culture. The results in table 2 are based on a logistic regression, for which we report the independent variables’ coefficients, standard errors and the p-value for the significance tests.

Table 4 Effects of demographic characteristics on attending public cultural activities

Demographic Variables influencing attendance	Coefficient	Standard error	p-value
Age	-.171	.038	.000
Age Square	.002	.000	.000
Gender	-.195	.145	.180
NrChild	-.083	.116	.477
Studies	.242	.032	.000
Local	.280	.137	.040
Constant	.084	.591	.887

While such a specification explains only part of the variation in attendance of artistic events, we observe a few significant results that merit further consideration. With an increase in age individuals initially attend less cultural events, but the relationship is reversing for the older population. Age has a relatively high negative impact, significant at 5% level, while age square has a smaller positive impact reversing this effect, at a 1% level of statistical significance.

Being a native of the city impacts most on involvement in cultural activities, at a 5% level of significance and showing the importance of the arts for the local population in particular. Given that locals are 28% more likely to have attended a public cultural event in the previous year, it is well possible that this is a reflection of the availability of such goods in the urban environment. Further implications for the general benefit of promoting a ‘creative city’ can be sought, whereas public spending towards cultural activities is best focussed on the long-term and primary beneficiaries of such investment, the active population in the city, valuing the arts and culture beyond any short-term tourist attraction.

In the same way as being a native of the city increases cultural involvement, having one more year of study also consistently increases the propensity to attend cultural events, this time at 1% significance level. This also underlines the relevance of investing in public arts, in particular for the attraction of a skilled urban population, or a broader ‘creative class’.

5.4 *Income, education and the support of culture and innovative art forms (e.g. street art)*

In this section we explicitly introduce the economic dimension in the valuation of culture, by analysing the financial contribution that people are willing to make towards public art. We are controlling at this step for the level of income of our respondents along with demographic characteristics, to disentangle the capacity to pay from other motivations in the support people state towards culture. Table 5 provides in this sense OLS results using a specification where contribution to art from taxes allows for a reallocation of public spending. A similar regression was run with the variable on spending preferences where individual taxes would increase, with little difference in results.

Again, the results strongly support that education is the one most significant characteristic that increases support by individuals for the arts. Additionally, we see that having more children matters in the willingness to fund the arts and culture. With each child respondents are prepared to pay an additional RON 13.93 towards subsidising culture. Both children and education have an impact at 5% significance level on the support of public forms of culture.

Table 5 A valuation of public art and culture through individual willingness to pay

Regression results on willingness to pay towards public culture			t-statistic
	Coefficient	Standard error	
(Constant)	-21.022	33.277	-.632
Age	.840	2.013	.417
age2	-.016	.023	-.687
Gender	3.169	7.629	.415
Number of Children	13.938	5.964	2.337
Years of Study	3.521	1.559	2.258
In town of birth	-5.407	7.621	-.710
Gross Monthly income	4.152	4.196	.990

Next, we have also considered the support people indicate for street art, as a specific and new form of public art. We have undertaken a regression analysis separately for those exposed to street art and those not seeing street art during the interviews for our survey. The results presented in table 6 and 7 are from OLS regressions. While not shown, we have replicated

the overall findings in ordered logit regressions that take into account levels in the willingness to pay variable towards estimating the value of street art.

First, we observe how individual incomes make a difference in how much the public is willing to pay in support for this form of urban art, with higher incomes meaning higher contributions. The result is significant at the 5% level. From tables 6 and 7 we can also see that higher income contributes to the willingness to pay towards public art, indifferent of whether respondents are encountering this directly or not. Additionally, age has ceased to be of any relevance towards how people view public art.

In the estimations focussing on street art valuation we note for the first time that the inclination of those with extra years of schooling to contribute more towards public art is weak. In fact, where street art is not visible to respondents directly, the support for public art linked to education is not significant even at the 10% level. Yet, when street art is pointed out to respondents directly, their support for the public art becomes once more positively correlated with education, with the result strongly statistically significant at the 1% level.

Table 6 Willingness to pay for street art where this is visible

Own contribution where individuals HAVE been exposed to street art			t-statistic
	Coefficient	Standard Error	
(Constant)	1.423	.592	2.406
Age	-.054	.034	-1.577
age2	.000	.000	.800
Gender	-.004	.132	-.034
Number of Children	-.045	.098	-.456
Years of Study	.119	.026	4.651
In town of birth	.130	.134	.967
Gross Monthly income	.210	.075	2.805
R-Squared	.14		

Table 7 Willingness to pay for street art where this is a hypothetical option

Own contribution where individuals have NOT been exposed to street art			t-statistic
	Coefficients	Standard Error	
(Constant)	1.922	.581	3.309
Age	-.002	.038	-.041
age2	.000	.000	-.283
Gender	.111	.136	.816
Number of Children	.028	.116	.241
Years of Study	.045	.031	1.481
In town of birth	-.445	.132	-3.365
Gross Monthly income	.137	.073	1.893
R-squared	0.07		

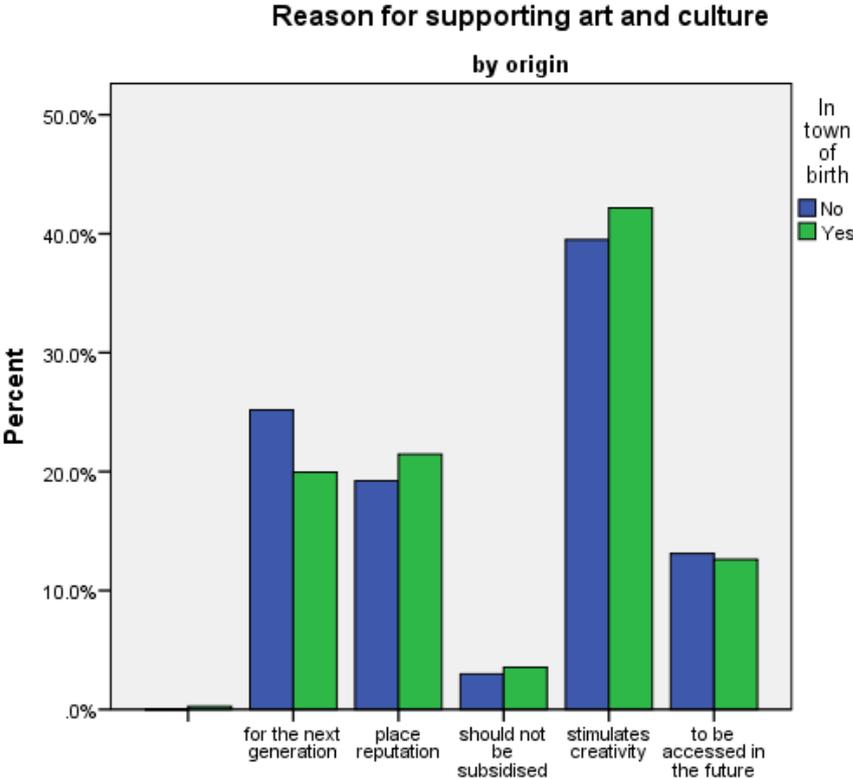
In sum, education loses its strength of explanation for higher willingness to pay for what makes a hypothetical public good when respondents are not faced directly with the public art form under discussion. It is possible that we are dealing with a learning process requiring exposure to such new, public goods; visibility of street art enhances the appreciation of this form of art to the skilled, or more educated consumer and in spite of its initially controversial character in the collective mind. Given our experimental setting with exposure to street art as a form of public good we would conclude that those more open to learning about new or controversial goods are responding positively when encountering such goods directly and even where their initial attitude is no different to the rest of the population before being exposed to the new public good.

5.5 Main reasons given for supporting the arts and culture, by socio-economic categories

Here we distinguish between the relevance of a few broad reasons for which the public in our survey expressed their support for public arts and culture. These reasons are aligned with the externalities of artistic output as a public good, and reflect the non-user value dimension of the arts discussed earlier in this paper. The areas highlighted as most important in the public view can be interpreted as well as priorities to be pursued by cultural policy, and to be associated with various categories of beneficiaries. A distinction will be made in this sense between categories of beneficiaries of cultural goods, by the links they have to the city, and their broad socio-economic traits.

We report in figure 4 what mattered most to all those covered by our survey. As the bar chart suggests, creativity and innovation is most frequently identified as the primary benefit of arts and culture as a public good. About 40% of respondents overall and even a higher proportion of those native to the city saw the impulse to creativity as being most relevant. Values such as the reputation of a place, linked to cultural identity and prestige derived for a place from its support of culture are seen less relevant, though still being cited by a bit over 20% of those native to the city.

Figure 4



Note that the strength of our central empirical finding on creativity has been increased by reshuffling the order of options suggested by interviewees as the main reason why people believe art and culture should be supported from public funds. The potential to enhance creativity emerges as the most important dimension to be encouraged through public cultural policies. Beyond the specific perceptions about cultural goods, creativity is also seen in urban studies as a priority for cities that wish to grow on the basis of a skilled workforce capable to drive innovate industries. The argument for public support of the cultural sector can thus be linked with its ability to create the right environment towards the *creative city* and promoting urban economic development.

Finally, we observe the preferences for arts and culture support by socio-economic groups, in table 8. Note in this sense that students, employees and the self-employed value creativity more than other groups captured by the survey. People prioritise the values derived from the arts in line with their age profile or their main concerns. For example, pensioners or homemakers care most about the value of arts and culture through their contribution to future generations, or for the heritage dimension of public art. An inclusive arts policy would

wish to account for all socio-economic categories and their distinctive priorities. Yet, where creativity remains the main aspect of culture valued by the economically active population it can justify public spending on arts and culture as an investment in innovation capacity for those directly involved in building a dynamic, creative economy.

Table 8 Main reason for supporting the Arts and Culture, by occupational categories

	Student	Employee	Unemployed	Self- Employed	Pensioner	Homemaker	ALL
for the next generation	16.9%	24.6%	28.6%	23.7%	41.1%	27.8%	23.1%
place reputation	23.4%	18.8%	14.3%	18.6%	13.7%	27.8%	20.2%
should not be subsidised	2.5%	2.9%	21.4%	3.4%	4.1%	5.6%	3.2%
stimulates creativity	44.2%	40.1%	28.6%	45.8%	28.8%	16.7%	40.5%
to be accessed in the future	12.7%	13.5%	7.1%	8.5%	12.3%	22.2%	12.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

6. Summary of findings and conclusion

To conclude, our study has contributed to the economic valuation of art and culture as public goods. We have attempted an empirical evaluation based on a willingness to pay study, using as reference point the reactions of the public to street art in a market with newly emerging cultural forms and public spaces. In the process we have gone beyond the restrictive framework of the ‘joyless economy’, about which we were warned by Tibor Scitovsky in 1976. We explored the challenges surrounding novelty for consumers, along with the ability of ‘skilled consumers’ to accept new public goods, or what might be predominantly perceived as controversial art. Street art is a good candidate for such an exploration, both due to its novelty as a public good, and the controversy in which it has been conceived, from the graffiti movement. Nowadays, street art festivals proliferate around the world and are relabelled as

a means to drive urban creativity, and stimulate innovative economic activity. It is in this sense that our specific research findings would be framed below. We thereby observed how:

- Those who attend public cultural events are generally happier, with arts and wellbeing reinforcing each other in a sign of prosperity that goes beyond achieved income levels.
- People exposed to street art even subconsciously are prepared to pay some 20% more towards the arts and culture than those outside the range of public art (i.e. a monthly average of RON 43.61 versus RON 35.13).
- New art forms in the shape of street art commands in over 90% of the population a positive valuation. People are more often willing to pay higher amounts towards a piece of public art if they are directly presented with street art, rather than talking about public art as a hypothetical good. There is a learning process involved in novelty goods, which might particularly capture the imagination and their own drive for innovation amongst the better skilled.
- Education is a strong determinant of higher attendance of traditional forms of publicly supported cultural events, leaving space for new forms of public art to be more inclusive and accessible for everyone. While attendance of cultural events is rising significantly with every year of education, street art is available to all. Street art is more highly valued by the better educated than the population at large only where they are presented with it explicitly.
- Being a native of the city increases the probability of an individual to attend cultural activities by 28%, and we observe in our sample that people value the arts and culture primarily for their potential to stimulate creativity. Especially amongst the self-employed, employed, but also students, the creativity that art supports is seen as the main reason for subsidising cultural goods. As such, investing in arts and culture can stimulate further economic growth through a creative environment for the working population, a driving force behind creative cities and our predominantly urban economies.

Further research in this line of reasoning would be considered, in particular to query the way in which exposure to the arts can drive productivity. Additional work can explore the feature whereby some old industrial sites are being transformed by street art, along with the

rehabilitation of old city centers and creative quarters where street artists have begun their trade.

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APPENDIX: Variables definition and content

Location of interview:

In front of a work of street art (1), In front of a neutral background, with no visible street art (0).

Gender:

Male (1), Female (0)

Happiness level time of interview:

Scale from 1 to 10 (where 1 is extremely bad and 10 is excellent):

General Life satisfaction:

Scale from 1 to 10 (where 1 is extremely bad and 10 is excellent):

Age:

In years.

Affinity to the city of reference:

If respondent is in her city of birth (1), if not in the city of birth (0)

Main Occupations:

Student, Employee, Unemployed, Self-Employed, Pensioner, Homemaker.

Alternative dummies have been used, with the status of student as (1) and non-student (0).

Education:

Stated years of education completed to date of interviews.

Gross monthly income:

This would include pocket money for students.

The following income brackets can be chosen by respondents: 0-499 RON; 500-1000 RON; 1000-2300 RON; 2300-4000 RON; over 4000 RON.

Attendance of Public Cultural Events:

The variable records whether individuals attended a set of public cultural or artistic events within the last 12 months including: theatre, classical concerts, ballet, museums or historical sites, arts exhibitions or opera, all of which are typically subsidised by governments.

If any of these events were attended the variable is (1), and if no public culture events were attended it is (0).

Reason for public support to art and culture:

Documents the main reason for which respondents believe that cultural activities should be subsidised. The options given are as follows, and draw on the non-user value dimensions of art summarised by Frey (2003):

‘Art should not be subsidised’, ‘We can access them in the future’, ‘These are values for future generations’, ‘Culture is raising the reputation of a place’, ‘Arts and culture stimulate creativity’.

Willingness to pay for subsidising public culture:

Two related variables look into the amount respondents are willing to contribute through taxation towards the public arts and culture, in RON. The question has two options, as discussed in reference to Throsby and Withers (1986). We asked respondents:

‘Indifferent whether you have been at any cultural or artistic event, what sum would you be happy to contribute monthly towards the support of arts and culture through public funds:

- a) **If the tax you pay would change from the current level**, so that your stated sum would become what you effectively paid instead. (in RON)
- b) Now suppose that indifferent of the sum that you would be happy to pay monthly from general taxes, **your own effective tax would not change from the current level**. In turn, the proportion dedicated to art and culture from your total tax bill would be changed to accommodate your preferred sum. **What sum** would you be happy to have allocated to arts and culture from your taxes under this new scenario? (In RON)'

Willingness to pay towards street art:

The two related variables look into the amount respondents are willing to contribute through taxation towards the public arts and culture, in a similar way as in the case of the general contribution to public arts and culture.

However, this time a few payment options were suggested by us, falling within the brackets given below. These restricted options arose as a consequence of our pilot project trials, whereas respondents found it hard to relate to a potential price for a specific work of public art.

The question varied slightly between those who were directly exposed to a piece of street art and those who were given a hypothetical choice to have a mural painted on a grey urban background.

We presented the following options for *individual payments towards a city mural decoration*:

0 RON; 1-10 RON; 11-20 RON; 21-30 RON; 31-40 RON; over 40 RON

We present the following options for a *total payment towards a city mural decoration, through government spending*:

0 RON; 0-499 RON; 500-1000 RON; 1000-2300 RON; 2300-4000 RON; over 4000 RON

Urban environment significance to individual wellbeing:

This variable assesses on a Likert scale the significance attached by respondents to the aesthetic quality of their city environment, towards their individual wellbeing (happiness).

Scale from 1 to 10 (where 1 is not important at all and 10 is extremely important).