

HOUSING ESTATE GAME v.2.0 - IDEAS FOR DESIGN OF HOUSING ESTATES' DENSITY MODELS - THE CASE STUDY OF URBANISM WORKSHOPS GAME CREATED FOR SCIENCE PROMOTION

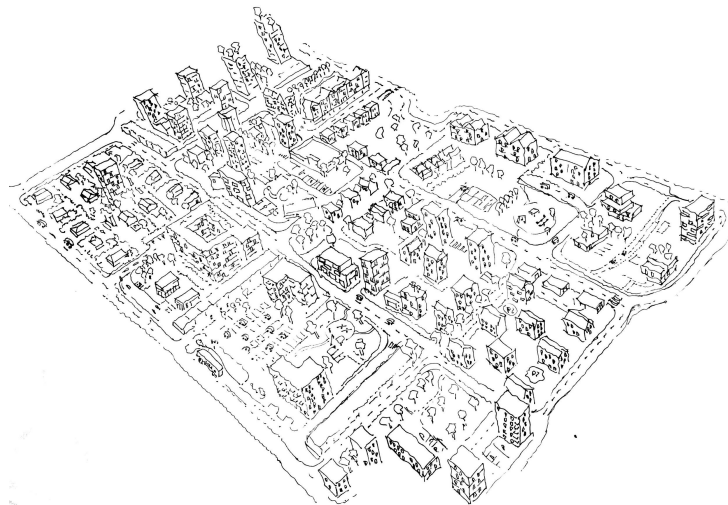
*HOUSING ESTATE GAME v.2.0 - KONCEPCJE MODELI INTENSYWNOŚCI ZABUDOWY -
PRZYPADEK GRY PRZYGOTOWANEJ NA POTRZEBY POPULARYZACJI NAUKI*



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INSPIRACJE / INSPIRATIONS

PLAY is a human activity which **requires the creation** of a convention, obeying the rules, and which leads to a result that can be evaluated in the light of established criteria

Styk Jan Gamers, pool and strategies of information architecture Technical Transactions Architecture Issue 8A/2015 p. 217-222



INSPIRACJE / *INSPIRATIONS*

One of the reasons for using **GAMES in solving urban issues is a dose of humor**. In modern pedagogy, the use of humor is considered an effective strategy in formal and informal learning.

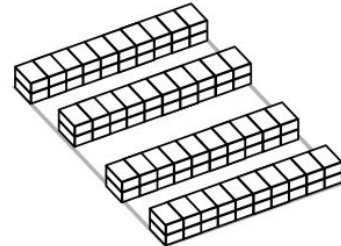
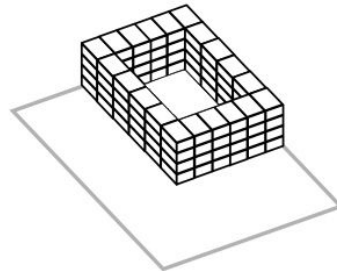
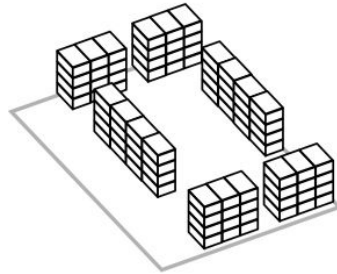
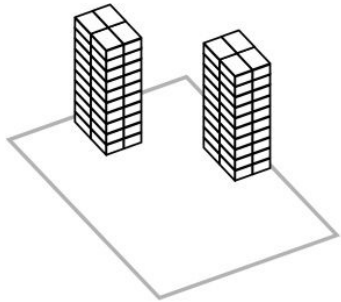
*Ján Legény & Robert Špaček Humour as a device in architectural education Volume 21, Number 1, 2019 © WIETE 2019
Global Journal of Engineering Education p.6-13*



INSPIRACJE / *INSPIRATIONS*

The fundamental assumption for this article can be one that **contemporary habitats should make a compact city.**

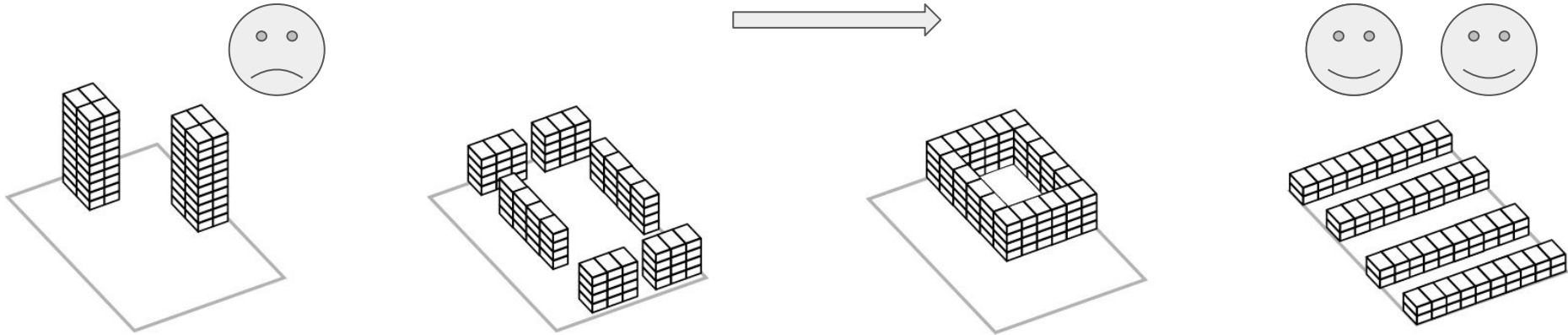
COMPACTNESS can be achieved by density but density may have different forms



INSPIRACJE / *INSPIRATIONS*

The fundamental assumption for this article can be one that **contemporary habitats should make a compact city.**

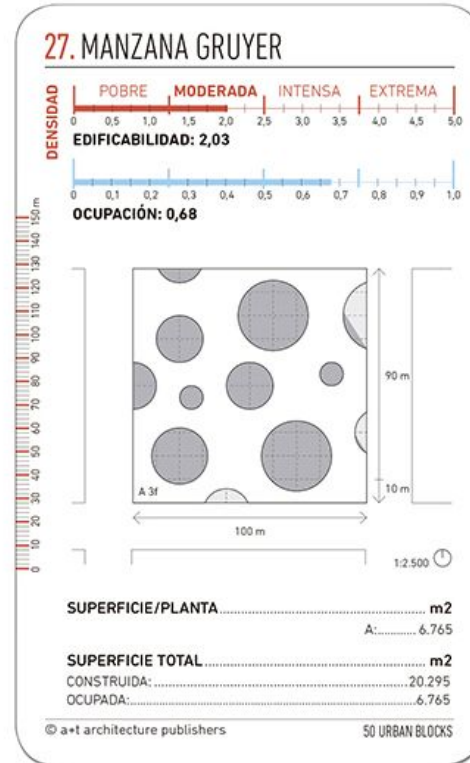
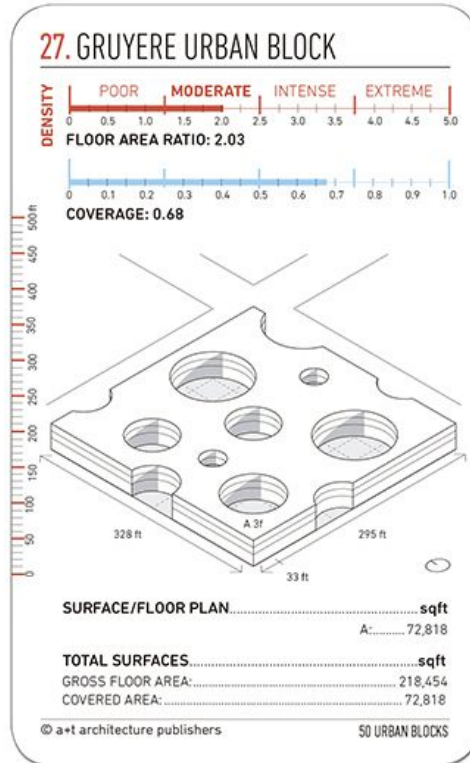
many Europeans still prefer
low-density single-family housing rather than
multi-family housing
that is often associated with big multi-family blocks.



INSPIRACJE / *INSPIRATIONS*

Playing cards for architecture students of the a+t architecture publishers URBAN BLOCKS

<https://aplust.net/tienda/otros/Serie%20Densidad/50-Urban-Blocks-Cartas/>



Housing estate game v.2.0 REALIZACJA GRY / GAME APPLICATION : Noc Naukowców 2018.10.13

RULES' game cards have been shown to the participants.

These game cards were shown as slideshow during the workshops, and given in printed version

*Karty z zasadami gry pokazane uczestnikom w formie pokazu slajdów w pętli przez czas warsztatów.
Rozdano również wersję drukowaną kart.*

Tabela punktów:
point table:

 **1 mieszkanie = 1 punkt**
1 apartment = 1 point

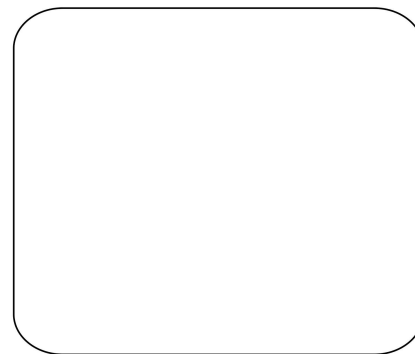
 **1 mieszkanie = 1 miejsce postojowe**
1 apartment = 1 parking space

 **1 drzewo (pow. 1 miejsca postojowego) = 2 punkty**
1 tree (surface 1 parking space) = 2 points

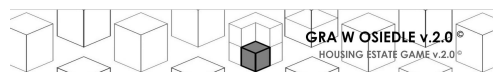
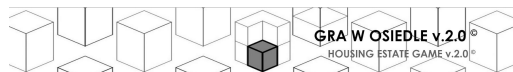
 **1 parking dla rowerów (powierzchnia 1 miejsca postojowego) = -2 miejsca postojowe**
1 bicycle parking (surface 1 parking space) = -2 parking spaces

 **2 parkingi rowerowe <=> konieczność realizacji ścieżki rowerowej**
2 bicycle parking <=> necessity of implementation bicycle path

 **1 usługa = 3 punkty**
1 service = 3 points



	liczba number	ilość amount punktów of points
ilość mieszkań number of apartments		
powierzchnia zieleni green area		
ilość drzew number of trees		
ilość miejsc parkingowych number of parking spaces		
ilość parkingu rowerowych number of bicycle parking		
ilość przystanków autobusowych number of bus stops		
ścieżka rowerowa bicycle path		
ilość usług number of services		
ilość placów zabaw number of playgrounds		
suma pkt: sum of points:		



Two examples of game cards proposed by the author with Marta Cabaj, graphic design: Marta Cabaj

RULES' game cards have been shown to the participants.

These game cards were shown as slideshow during the workshops, and given in printed version

Karty z zasadami gry pokazane uczestnikom w formie pokazu slajdów w pętli przez czas warsztatów.

Rozdano również wersję drukowaną kart.



1 mieszkanie = 1 punkt

1 apartament = 1 point



1 mieszkanie = 1 miejsce postojowe

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1 drzewo (pow. 1 miejsca

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1 tree (surface 1 parking space)

= 2 points

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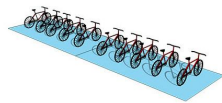
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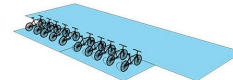


2 parkingi rowerowe <=> konieczność

realizacji ścieżki rowerowej

2 bicycle parking <=> necessity of

implementation bicycle path



1 usługa = 3 punkty

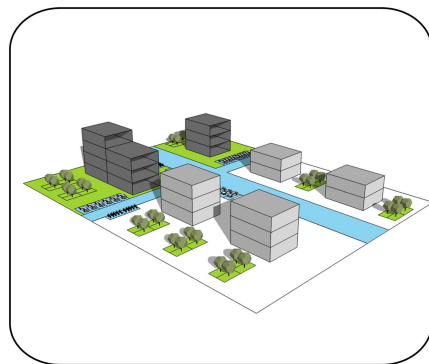
1 service = 3 points

Housing estate game v.2.0 REALIZACJA GRY / GAME APPLICATION : Noc Naukowców 2018.10.13

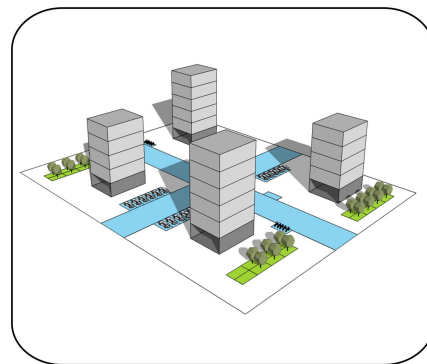
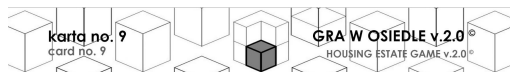
Exemplary game cards have been shown to the participants.

These game cards were shown as slideshow during the workshops, and given in printed version

Przykładowe rozwiązania zostały pokazane uczestnikom w formie pokazu slajdów w pętli przez czas warsztatów. Rozdano również wersję drukowaną kart.



	liczba number	ilość punktów amount of points
Ilość mieszkań number of apartments	10	10
powierzchnia zieleni green area	40%	2
Ilość drzew number of trees	32	64
Ilość miejsc parkingowych number of parking spaces	20	
Ilość parkingów rowerowych number of bicycle parking	3	
Ilość przystanków autobusowych number of bus stops		
ścieżka rowerowa bicycle path	+	
Ilość usług number of services	10	30
Ilość placów zabaw number of playgrounds		
suma pkt:	sum of points:	106



	liczba number	ilość punktów amount of points
Ilość mieszkań number of apartments	18	18
powierzchnia zieleni green area		
Ilość drzew number of trees	24	48
Ilość miejsc parkingowych number of parking spaces	22	
Ilość parkingów rowerowych number of bicycle parking	2	
Ilość przystanków autobusowych number of bus stops	1	
ścieżka rowerowa bicycle path		
Ilość usług number of services	4	12
Ilość placów zabaw number of playgrounds	1	2
suma pkt:	sum of points:	80



Two examples of game cards proposed by the author with Marta Cabaj, graphic design: Marta Cabaj

Housing estate game v.2.0 REALIZACJA GRY / GAME APPLICATION : Noc Naukowców 2018.10.13

35 persons took part in the workshops, of the age from 9 to 15.

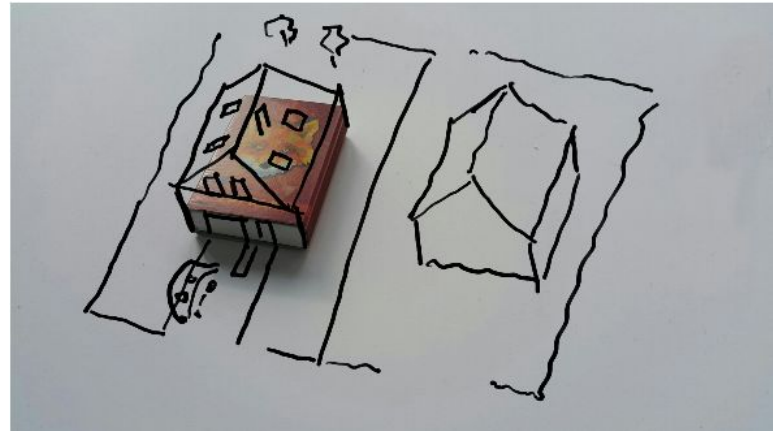
W warsztatach wzięło udział 35 osób, w wieku od 9 do 15 lat.



At the beginning, a short introductory lecture was presented. The lecture explained the basic rules of creating proper housing estates, showing real housing estates' images as well as illustrations of models that resemble housing estates on the images.



Na początku zaprezentowano krótki wykład wprowadzający. Wykład wyjaśnił podstawowe zasady tworzenia odpowiednich osiedli mieszkaniowych, pokazując prawdziwe osiedla mieszkaniowe, a także ilustracje modeli przypominających osiedla mieszkaniowe na zdjęciach.

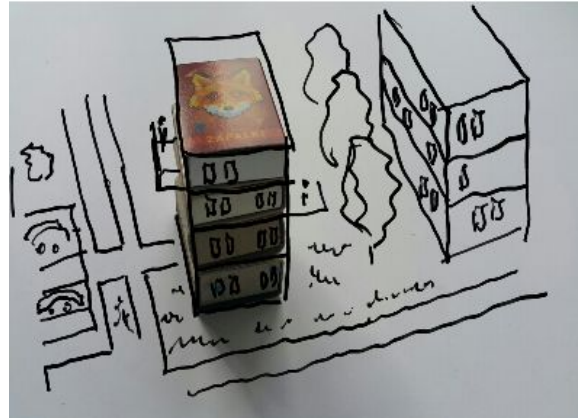


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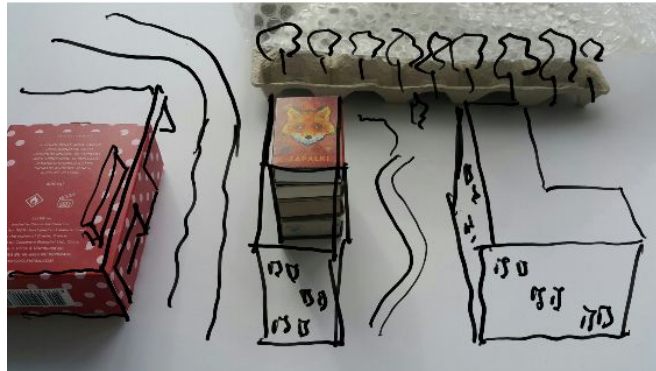


Housing estate game v.2.0 REALIZACJA GRY / GAME APPLICATION : Noc Naukowców 2018.10.13

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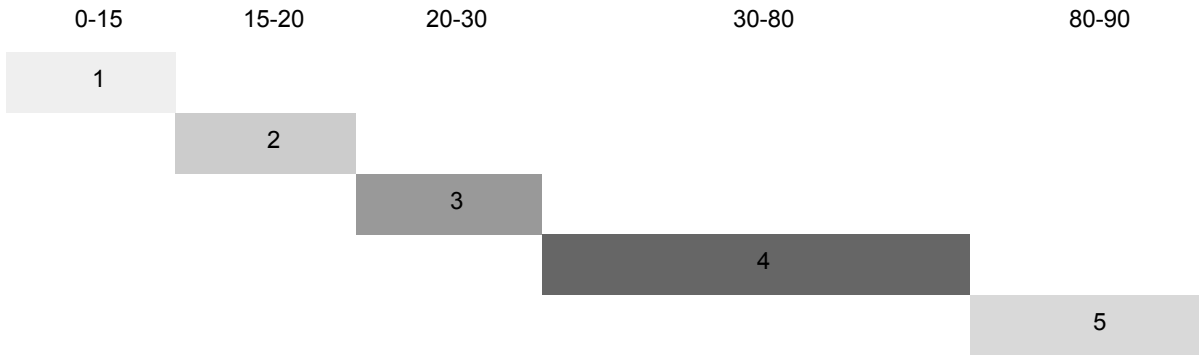


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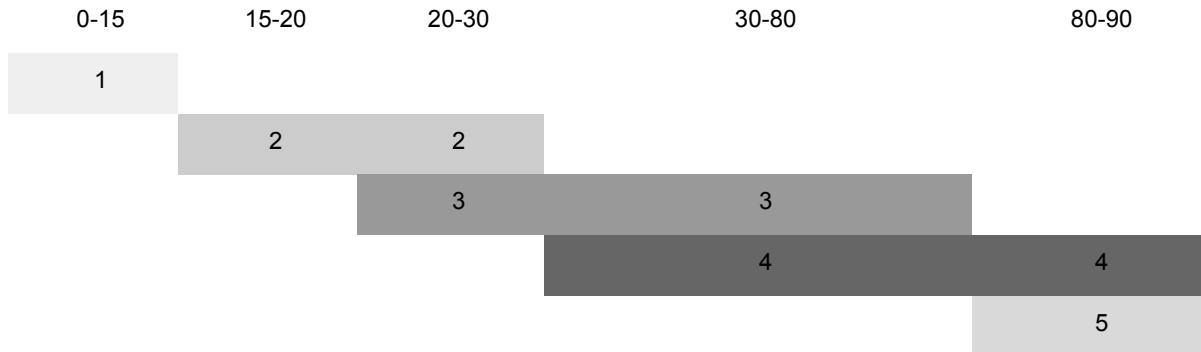


REALIZACJA GRY / *GAME APPLICATION* : Noc Naukowców 2018.10.13

Workshops optimal and realtime framework



Workshops' optimum timeline framework with phases (time in minutes) 1-Introduction lecture, 2-Rules explanation, 3-Questions and answers, 4-Workshops, 5-Total points count, Winner selection, justification



The workshops' realtime framework (Table 2) was dramatically different from the optimal framework (Table 1). The introduction was realized according to plan, but then it was necessary to provide explanations and answer questions which took nearly until the end of the workshops. Some of the participants were finishing their models until the end of workshops to make the model more effective. The most significant problem was counting points and settling the total score. The team were doing it by themselves very quickly and not necessarily correctly, to get most points and possibly win.

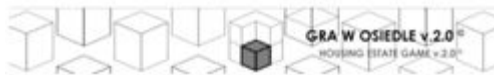
Housing estate game v.2.0 REALIZACJA GRY / GAME APPLICATION : Noc Naukowców 2018.10.13

Results

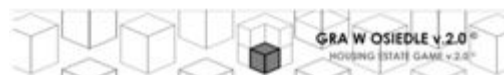
Wyniki



	liczba	number	liczba punktów	amount of points
liczba mieszkań	24	number of apartments	34	
powierzchnia zielona	60%	green area	3	
liczba drzew	7	number of trees	14	
liczba miejsc parkingowych	112	number of parking spaces		
liczba parkingów rowerowych	+	number of bicycle parking		
liczba przystanków autobusowych	+	number of bus stops		
ścieżka rowerowa	+	bicycle path		
liczba usług	9	number of services	27	
liczba placów zabaw	+	number of playgrounds		
suma pkt.		sum of points	68	



	liczba	number	liczba punktów	amount of points
liczba mieszkań	21	number of apartments	21	
powierzchnia zielona	80%	green area	4	
liczba drzew	30	number of trees	60	
liczba miejsc parkingowych	15	number of parking spaces		
liczba parkingów rowerowych	2	number of bicycle parking		
liczba przystanków autobusowych	2	number of bus stops		
ścieżka rowerowa	+	bicycle path		
liczba usług	6	number of services	18	
liczba placów zabaw	+	number of playgrounds		
suma pkt.		sum of points	93	



Two examples of game cards proposed by the author with Marta Cabaj, graphic design: Marta Cabaj

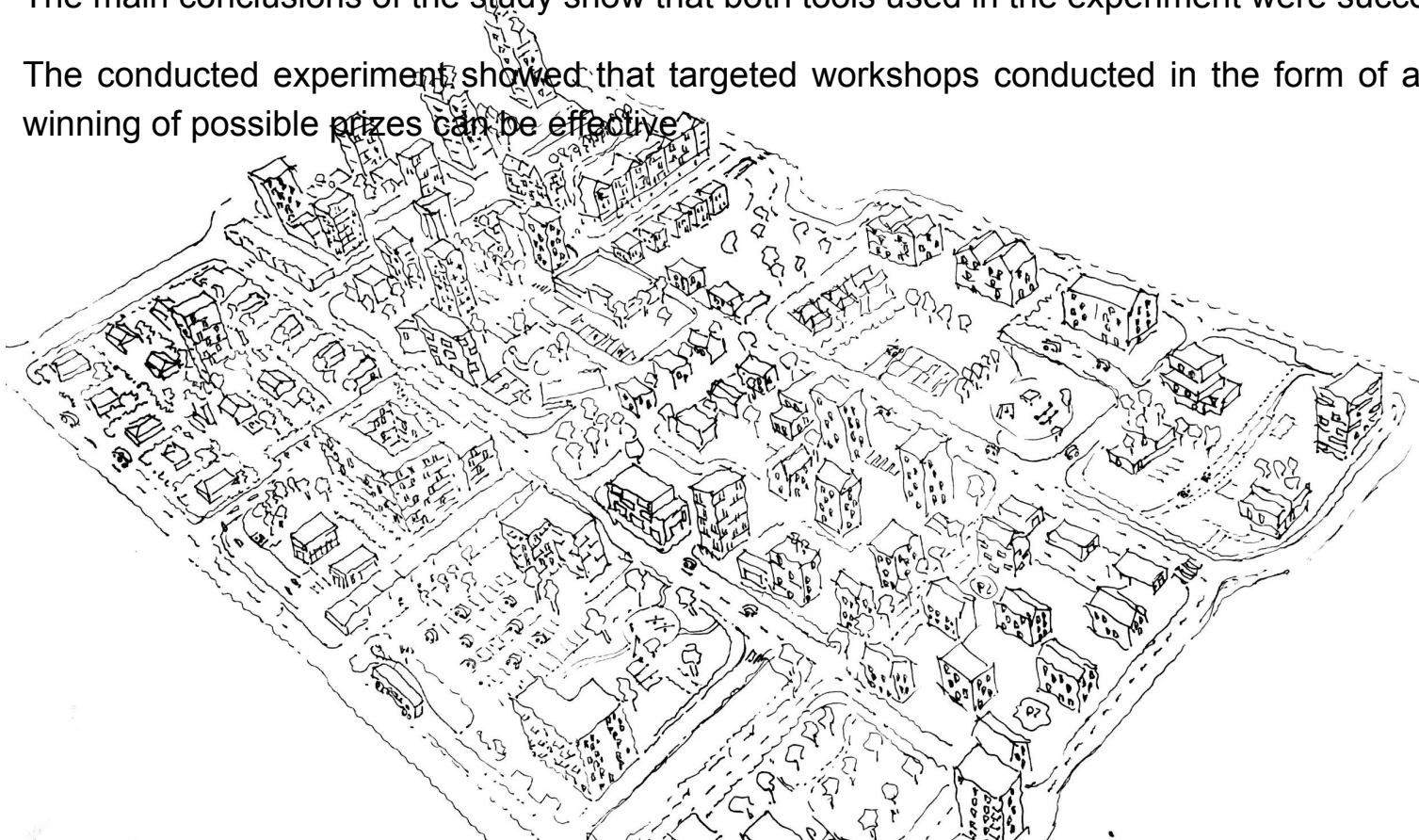
EFEKTY GRY / *GAME APPLICATION EFFECT*: Noc Naukowców 2018.10.13



WNIOSKI / CONCLUSIONS

The main conclusions of the study show that both tools used in the experiment were successful.

The conducted experiment showed that targeted workshops conducted in the form of a game with winning of possible prizes can be effective.



WNIOSKI / CONCLUSIONS

Although the experiment worked, the author has several remarks about the workshops: the rules were either too complicated or some participants were too young to implement them properly.

There was too little time for checking the number of collected points on the basis of the design proposal. Remarks for future editions of the workshops are as follows: provide more time for the workshops: ca. 120 minutes instead of 90 minutes. Reserve more time for conclusion and discussion.



PODZIĘKOWANIA / ACKNOWLEDGEMENTS

The HOUSING ESTATE game has been developed by Tomasz Bradecki since 2014 during various workshops for pupils from primary and secondary schools. The game has been tested several times during ŚLĄSKA NOC NAUKOWCÓW (SILESIA NIGHT OF THE SCIENTISTS) and was also presented 2 times during the SILESIA FESTIVAL OF SCIENCE.



PODZIĘKOWANIA / ACKNOWLEDGEMENTS

The HOUSING ESTATE v.2.0 game has been conducted by Tomasz Bradecki with Marta Cabaj on 25 October 2018. The experiment was video-recorded and available publicly at: <https://youtu.be/796meKTCOgs>



WNIOSKI / CONCLUSIONS

The authors hope that these kinds of **games** and their possible successors may be **more broadly continued and promoted**, thus contributing to better education of young people in the most basic scope of urban planning and architecture.

Autorzy mają nadzieję, że tego rodzaju gry i ich ewentualni następcy mogą być szerzej kontynuowane i promowane, przyczyniając się w ten sposób do lepszej edukacji młodych ludzi w najbardziej podstawowym zakresie planowania urbanistycznego i architektury.

LITERATURA / LITERATURE

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