# The palio of Siena and the contemporary contrada system (codebook for data)

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## General information

Several data files are associated with "The *palio* of Siena and the contemporary *contrada* system" (10.31235/osf.io/hxyvc). This codebook provides a description of each one.

For data files in .csv format, a description of each column is provided. For those in geographical formats (e.g. .geojson, .gpx), a general description of the file is provided including how and when the data were obtained

The codebook is organised in the same way the data files are. Namely, within the directory ./data/, files are in dedicated sub-directories: attitudes/, contrada-descriptives/, contrada-size/, geographical/, gps/, and survey/.

All the data collected or collated by the authors are licensed under CC BY-SA 4.0. The .osm data are from "OpenStreetMap" and are available under the Open Database Licence; see https://www.openstreetmap.org/copyright.

#### Note on data usage, consent, and anonymity

Some of the shared data has undergone redaction for two reasons. First, the raw data contain personal information. Combining personal information could make an individual identifiable. Therefore, we have removed or modified certain personal information to increase the privacy of our participants. Second, the raw data contain information relating to the specific *contrada* participants are a member of. We have removed or anonymised *contrada* names or references to the *contrade* in order to maintain the anonymity of the *contrade* involved.

Note that while participants provided informed written consent that data could be shared, please respect each individual's right to privacy and do not attempt to identify any of the participants in any of the samples.

Should access to the raw data be required, please contact the authors.

## attitudes

#### data-redacted.csv

code	label	type	n_missing
data_collected	year of data collection	double	0
period	period of data collection (one = July 2107, two = March 2018, three = June 2018)	character	0
id	participant identification code	character	0
session	session of data collection, which corresponds to an event in which data collection occured in each contrada per period and data_collected	double	0
consent	whether participant provided consent $(1 = yes)$	double	0
complete	whether participant provided a response to all attitude items	character	0
age	age of the participant (calculated from redacted year of birth)	double	0
gender	gender indicated by the participant	character	0
contrada	contrada membership of the participant	character	0
att_aqu	attitude towards Aquila	double	1
att_bru	attitude towards Bruco	double	1
att_chi	attitude towards Chiocciola	double	1
att_civ	attitude towards Civetta	double	0
att_dra	attitude towards Drago	double	1
att_gir	attitude towards Giraffa	double	1
att_ist	attitude towards Istrice	double	1
att_leo	attitude towards Leocorno	double	1
att_lup	attitude towards Lupa	double	1
att_nic	attitude towards Nicchio	double	1
att_oca	attitude towards Oca	double	1
att_ond	attitude towards Onda	double	1
att_pan	attitude towards Pantera	double	1
att_sel	attitude towards Selva	double	1
att_tar	attitude towards Tartuca	double	1
att_tor	attitude towards Torre	double	1
att_val	attitude towards Valdimontone	double	1

# contrada-descriptives

## contrada-information.csv

Data from Dundes and Falassi (1984) (pg. 32, 36, and 47), except full\_title from the website of each contrada (last accessed 2017, precise date unknown).

code	label	type	n_missing
contrada	contrada	character	0
translation_i	English translation of contrada name	character	0
translation_ii	alternative English translation of contrada name	character	14
symbol_simple	main animal (real or imaginary) element in symbol	character	0
symbol_detailed	full description of symbol	character	0
colours_simple	main colour or colours	character	0
colours_detailed	full description of colours	character	0
full_title	full name of contrada	character	0
preposition	preposition in full name of contrada	character	0
$full\_title\_translation$	English translation of honorific in full name of contrada	character	9
festa_month	month of festa titolare	character	0
festa_day	day of festa titolare	double	0
terzo	terzo	character	0
designation	designation of members	character	0

## $\verb|contrada-relationships.csv|\\$

Matrix of relationships between *contrade*, classified as "ally", "neutral", "rival", or self". Data from Filiani and Zaffaroni (2002) (p. 5).

## contrada-size

data.csv

Figures related to contrada membership size from Siena Free (2012) interviews and Falassi (1983).

code	label	type	n_missing
contrada	contrada	character	0
terzo	terzo	character	0
figure_overall	overall figure for members provided in SienaFree_2012	double	6
	interview, if provided		
figure_range_min	minimum figure for members provided in SienaFree_2012	double	12
	interview, if range provided		
figure_range_max	maximum figure for members provided in SienaFree_2012	double	12
	interview, if range provided		
figure_old	figure for older members provided in SienaFree_2012	double	16
	interview, if provided		
figure_young	figure for younger members provided in SienaFree_2012	double	16
	interview, if provided		
accuracy	the type of figure provided in SienaFree_2012 interview	character	0
figure_falassi	figure from Falassi_1983	double	0
interview_text	translation of text in SienaFree_2012 interview	character	1

## geographical

#### contrada-boundaries.geojson

Geographical boundaries of contrada and non-contrada territories. Manually traced by A.R.K on https://geojson.io (last accessed 2020-12-18).

#### italian-cities.csv

Longitude, latitude, and population size for three cities (Siena, Milan, Rome). Downloaded using R package tidygeocoder (v. 1.0.1; last successful attempt 2021-04-20):

```
## csv of coordinates of cities in map of Italy
if (!file.exists("./data/geographical/italian-cities.csv")) {
   library(tidygeocoder)
    ## list of Italian cities
    italian_cities <-
        tribble(
            ~City, ~Country,
            "Siena", "Italy",
            "Rome", "Italy",
            "Florence", "Italy"
        )
    ## download osm data
   lat_lon_italian_cities <-</pre>
        italian_cities %>%
        geocode(city = City, country = Country, method = "osm",
                full_results = TRUE, custom_query= list(extratags = 1))
    ## wrangle and save data
   lat_lon_italian_cities %>%
        select(City, Country, lat, long, extratags.population) %>%
        rename(city = City,
               country = Country,
               lon = long) %>%
        rename_with(~gsub('extratags.', '', .)) %>%
        write_csv("./data/geographical/italian-cities.csv")
}
```

### siena-comune.geojson

Geographical boundaries of the municipality of Siena. Downloaded manually on 2020-06-05 by A.R.K. using http://overpass-turbo.eu/ with relation 42398 (for relation, see https://www.openstreetmap.org/relation/42398#map=12/43.3081/11.3297).

#### siena-locations.csv

Coordinates of contrada related buildings or locations. Manually inputted by A.R.K. by searching for relevant locations on https://www.openstreetmap.org (last accessed 2019, precise date unknown).

$\operatorname{code}$	label	type	n_missing
contrada	name of contrada or non-contrada territory	character	0
lon	longitude of building/location	double	0
lat	latitude of buildin/location	double	0
building	type of building/location	character	0

#### siena.osm

OpenStreetMap data for the city of Siena. Downloaded using R package osmdata (v. 0.1.3; last successful attempt 2021-04-20):

# giro-study

#### data-participants-redacted.csv

$\mathbf{code}$	label	type	n_missing
consent	whether participant provided consent	character	0
age	age of the participant (calculated from redacted year of birth)	double	0
gender	gender indicated by the participant	character	0
contrada	contrada membership of the participant	character	0
role	role in the procession	character	0

#### giro-visits.csv

code	label	type	n_missing
contrada	processioning contrada	character	0
territory_site	name of territory or site	character	0
church_visited	whether the procession visited the church in territory_site	double	6
	(as observed by A.R.K.; $1 = yes$ )		
societa_visited	whether the procession visited the clubhouse in	double	6
	territory_site (as observed by A.R.K.; $1 = yes$ )		
order_visited	sequence territory_site was visited $(1 = yes)$	double	4
period	period of the day the procession visited territory_site	character	2

#### giro-information.csv

code	label	type	n_missing
contrada	processioning contrada	character	0
date	ISO date of procession	double	0
am_start	start of procession before the afternoon break	double	0
am_end	end of procession before the afternoon break	double	0
pm_start	start of procession after the afternoon break	double	0
pm_end	start of procession after the afternoon break	double	0
count_alfieri	number of alfieri (flag-wavers) counted by A.R.K.	double	0
count_tamburini	number of tamburini (drummers) counted by A.R.K.	double	0
count_paggi	number of paggi (pages) counted by A.R.K.	double	0
gps_label_XX	role of the participant whose GPS track filename in ./gps/	character	0
	is labelled 01–12 (alf = alfiere, tam = tamburino)		

#### route-outline-[contrada].gpx

2 files, each corresponding to the outline of the *Civetta* and the *Leocorno* procession manually traced by A.R.K. on https://www.openstreetmap.org/. The corresponding .gpx files were downloaded on 2019-09-17.

#### gps

### tracks-[year]-[contrada]-[filenumber]-redacted.gpx

19 files, each corresponding to the raw .gpx file taken from the GPS device distributed to participants as part of the giro study. File names are as follows: tracks-[year]-[contrada]-[filenumber].

Each .gpx file was extracted from the corresponding device using the software GPSBabel (version 1.5.2; http://www.gpsbabel.org), using the following command in the shell: sudo gpsbabel -i skytraq,baud=38400,initbaud=4800 -f /dev/ttyACMO -o gpx -F tracks.gpx

Civetta files extracted 2018-06-18, Leocorno files extracted on 2018-06-23.

Each file was manually redacted on 2021-01-19. A.R.K. manually removed the period in the middle of the afternoon break, in the (unlikely) event that the participant returned home with the GPS device. Specifically, the period between 15 minutes after the afternoon break started and 15 minutes before the afternoon break ended was removed. The beginning and end of the afternoon break were the times recorded by A.R.K.

# survey

## data-redacted.csv

code	label	type	n_missing
id	participant identification code	character	1
contrada	contrada membership of the participant (anonymised)	character	0
study	the experimental study the questionnaire was linked to	character	0
period	the period of the year in which data collection occured	character	0
study_year	the year of data collection	double	0
session	session of data collection, which corresponds to an event	double	0
	in which data collection occured in each contrada per		
	study and study_year		
age	age of the participant (calculated from redacted year of	double	5
	birth)		
gender	gender indicated by the participant	character	5
employment	employment status (type of employment, if indicated,	character	5
1 0	redacted)		
personal_income	level of income	character	7
education	highest qualification attained	character	5
location_birth	location of birth	character	6
residence	residence	character	10
years_away	number of years lived outside the province of Siena	double	48
months_away	number of months lived outside the province of Siena	double	48
member kinship	whether reason for membership indicated either one or	character	6
	both parents		
member_birth	whether reason for membership indicated birth in the	character	6
	contrada territory		
member_choice	whether reason for membership indicated choice	character	6
member other	whether reason for membership indicated other	character	6
member_other_text	written response to reason for membership, for responses	character	476
	that indicated 'yes' in member_other (contrada	character	110
	identifying information, e.g. street names, redacted)		
protettore	been protettore in the previous two years	character	7
role_current	whether a formal position in the leadership of the	character	9
	contrada was currently held (specific position, if	character	0
	indicated, redacted)		
role_past	whether a formal position in the leadership of the	character	9
1010_past	contrada was held in the past (specific position, if	Circiractor	
	indicated, redacted)		
participation_social	frequency of participation in the social life of the contrada	character	6
participation_organisational	frequency of participation in the organisational life of the	character	9
participation_organisationar	contrada	Circiractor	
friends same contrada	number of closest friends who are a member of the same	double	10
	contrada as the participant	404510	10
friends_different_contrada	number of closest friends who are a member of a different	double	11
monds_amorome_contrada	contrada to the participant	double	
friends_no_contrada	number of closest friends who are not a member of any	double	11
	contrada	200010	
better_statement	agreement with the statement 'In general, my contrada is	character	18
	better than the majority of other contrade'	5110100001	
participation_religious	frequency of attendance at religious rituals	character	10
experience	had completed previous study	character	371
- inportoneo	1000 completed provides steady		011

## References

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