In [33]:

```
import numpy as np
from PIL import Image
from os import listdir, getcwd
from os.path import dirname, join
import matplotlib.pyplot as mplot
import cv2
```

In [35]:

```
path = join(getcwd(), 'einsteinatanderson')
filenames = [file for file in listdir(path)]
filenames = sorted(filenames, key=lambda x: int(x.replace('einsteinatanderson_', '').split('.')[-2]
))

imgs = []
for file in filenames:
    imgs.append(Image.open(path + '/' + file))

imgs[0].show()
```

In [17]:

```
n = np.arange(27)
n.reshape(3, 3, 3)
type(n)
```

Out[17]:

```
numpy.ndarray
```

In [18]:

```
m = np.asarray([[123,12,123,12,33],[],[]])
type(m)
```

Out[18]:

```
numpy.ndarray
```

In [65]:

```
im_g1 = cv2.imread('green.png',1)
im_g2 = Image.open('green.png')
# print(im_g1) #open as RGB
print(np.array(im_g2)) #open as RGBA
```

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```